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the West Virginia Medical Journal

OFFICIAL ORGAN OF
WEST VIRGINIA STATE
EDICAL ASSOCIATION

l. 67 No. 8

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JAN 11 1971

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JANUARY 1971

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Vol. 67 No. 1

The WEST VIRGINIA Medical Journal

Official Organ of the West Virginia State Medical Association

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Member 1971

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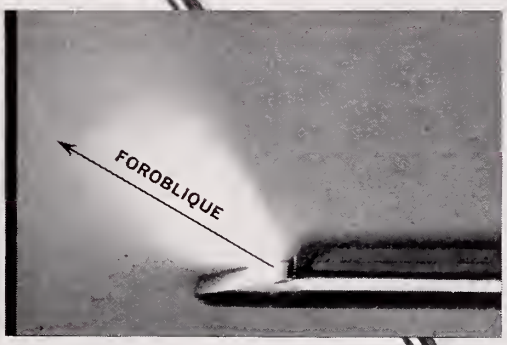

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WVU Medical Center
–News–

• Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.

THANKS to two West Virginia University professors, the nation's college and university students who write for campus publications can now compete for Biomedical Journalism Awards to be offered by the National Society for Medical Research.

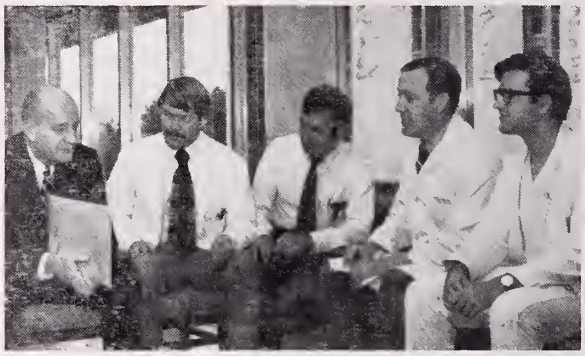
Dr. Bernard Zimmermann, Secretary-Treasurer of the Society and Chairman and Professor of Surgery in the WVU School of Medicine, and Dr. Guy H. Stewart, Dean of the School of Journalism, conceived and developed the student program, approved in September by the NSMR Board of Directors.

The program, to be announced in college publications, seeks to inspire students in any major field of academic study to write articles about research in the basic life sciences, and to provide recognition to those who contribute to public understanding of the role of laboratory animal science in biomedical research.

Two biomedical scientists, an eminent medical writer to be chosen by the Board, and a fourth judge to be selected by a national academic journalism association will review the students' articles.

Current plans call for three annual awards of $500, $300, and $200, to be presented at the close of each academic year to student authors of articles judged first, second and third.

The new award program will remain separate from the Society's already established Claude Bernard Science Journalism Awards, which are directed primarily toward writers for the public news media.



On a recent visit to the West Virginia University Medical Center in Morgantown, William F. Young of New York City (left) Secretary of the New York Life Insurance Company, talked with NYLIC Scholars in the School of Medicine. Shown with Mr. Young are (left to right) James H. Ashworth of Buckhannon, fourth-year student; Gary Bailey, first-year student from Beckley; Robert L. Hively, second-year student from Elkview in Kanawha County, and Ronald M. Cyphers, third-year student whose home is near Princeton in Mercer County. WVU is one of 11 schools New York Life chose in 1966 to inaugurate its Medical Student Scholarship Program.

Faculty Members Active

Among Medical Center faculty members who presented papers at the 15th Annual Potomac-Shenandoah Valley Postgraduate Institute, October 23 to 25 in Martinsburg, were Dr. Joseph R. Lancaster, surgery, "Gastric Ulcer;" Dr. Alexander V. Fakadej, pediatrics and neurology, "Role of Nutrition for the Developing Brain;" Dr. Robert J. Marshall, medicine, "Pulmonary Hypertension;" and Dr. W. Keith C. Morgan, medicine, "Recent Trends in the Treatment of Tuberculosis."

Fort Henry Seminar speakers for a panel discussion November 5 at Oglebay Park in Wheeling included Doctor Lancaster, and Dr. William Anderson, medicine. Theme for the seminar, presented by the Ohio County Medical Society, was "You, Your Ulcer and the Patient."

Medical Center faculty and ALFORD staff members who presented papers during the Third International Symposium on Inhaled Particles, held in London September 16 to 23, were Drs. W. Keith C. Morgan and N. LeRoy Lapp, medicine, and Dr. Harold Resnick, biochemistry. Doctor Morgan's presentation was "The Hemodynamic Effects of Coal Workers' Pneumoconiosis." Doctor Lapp spoke on "Quantitation of Secretory Iga in Chronic Pulmonary Disease with Particular Reference to Coal Workers' Pneumoconiosis," and Doctor Resnick's subject was "Immunoglobulin Levels in Berylliosis."

Presenting papers October 31 in Seoul at the scientific meeting of the Korean Society of Internal Medicine were Drs. Edward K. Chung and Edmund B. Flink, medicine. Doctor Chung's presentation was entitled "Fundamental Principles of Digitalization," and Doctor Flink's subject was "Therapeutic Implications of Studies of Diurnal Variation of Adrenal Function."

Dr. William T. Brandy, otolaryngology, presented a paper at the 80th meeting of the Acoustical Society of America, November 3 to 6 in Houston, Texas. He spoke on "Pip Detection in the Presence of a 50-Hz Signal During Monotic and Dichotic Presentations."

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The Month in Washington

• **From the Washington Office of the American Medical Association.**

REP. Wilbur D. Mills, Democrat of Arkansas, expressed concern about claims that prepaid group health care, or health maintenance, organizations could solve most of the problems of Medicare and Medicaid.

Speaking to a group of business executives, the Chairman of the House Ways and Means Committee, which handles Medicare and Medicaid legislation, said that he believed health maintenance organizations were "a reasonable and perhaps competitive alternative" for providing government-financed health care.

"However," he added, "I have become concerned that we will expect a great deal more from them than is likely to occur. The health industry is too diversified and its problems too complex to ever conclude that any one approach will solve most or all of the problems."

Health Insurance Issue

National health insurance is shaping up as one of the major domestic issues before the 92nd Congress, with catastrophic illness coverage gaining support from both Democrats and Republicans.

Advocates of catastrophic coverage counted on the Nixon Administration supporting such a plan, although Secretary Elliot L. Richardson of Health, Education, and Welfare called for its rejection at that time when it unexpectedly was placed before the Senate Finance Committee in executive session late last year near the end of the 91st Congress. But he left the door open for Administration support later.

"A proposal with this impact on the health care system deserves the closest kind of examination, not the hasty look it has been given in the waning days of an executive session," Secretary Richardson said.

The Secretary's comment was in response to the surprise announcement by Sen. Russell B. Long, Democrat of Louisiana, that he would offer a catastrophic illness coverage plan to the Finance Committee of which he is Chairman.

Senator Long's plan called for the government to pay 80 percent of all medical costs beyond the first 60 days of hospitalization or the first $2,000 of physicians' bills for all Americans who pay Social Security taxes and are under 65. He estimated the cost at $2.5 billion a year, to be financed by a one-half of one percent increase in Social Security taxes, to be shared equally by employers and employees.

The American Medical Association also cleared the way to add catastrophic coverage to its Medicredit plan for voluntary national health insurance. The House of Delegates at the AMA 1970 Clinical Convention in Boston approved a report of the Board of Trustees listing catastrophic coverage among the modifications and improvements being considered before reintroduction of the Medicredit legislation.

All national health legislation introduced during 1969-70 died with the final adjournment of the 91st Congress, and some modifications were expected to be incorporated in most of the leading proposals before their reintroduction in the 92nd Congress.

Medical Bills Enacted

Congress, in the final days of its 91st session, approved two important medical bills dealing with family practice and birth control.

The main feature of the family practice legislation authorized a three-year, $225 million program to help medical schools establish and operate departments to train family physicians.

The legislation passed the Senate and House with virtually no opposition. It was supported by the American Academy of General Practice and the American Medical Association. The Nixon Administration opposed it, mainly because of its categorical grant character.

Only nine U. S. medical schools already have established departments of family practice, and chief sponsors of the legislation hailed its passage as an important step toward alleviating the shortage of family physicians and slowing down the trend to specialization in the practice of medicine. It was praised as "a significant step in the efforts of Congress to meet the health crisis facing this nation."

A family planning bill authorizes birth control services, except abortion, for all American women who cannot afford them. The birth control services will include contraceptive drugs and devices, as well as consultations, examination, and instruction.

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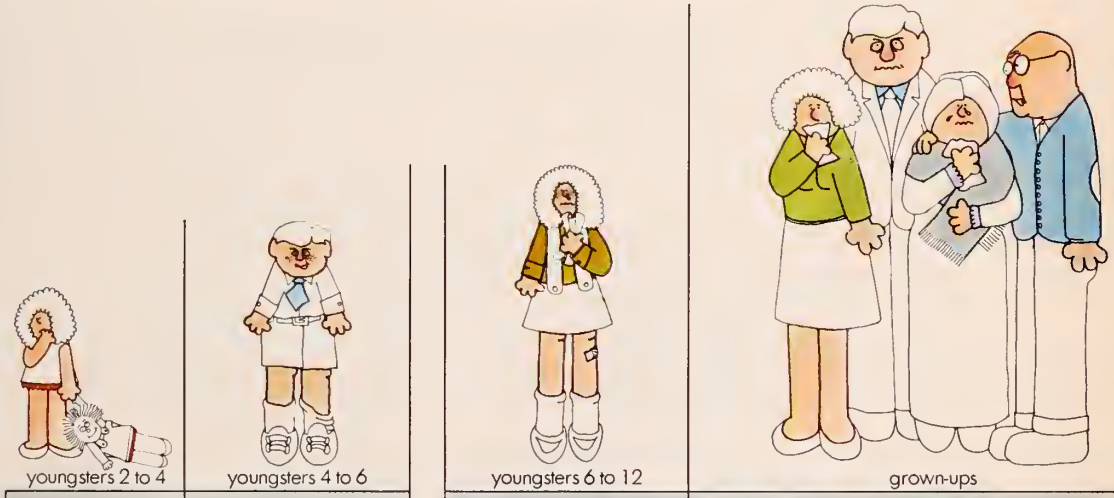

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Obituaries

REX DAUPHIN, M. D.

Dr. Rex Dauphin, Parkersburg radiologist, died of a heart attack while at work at Camden-Clark Memorial Hospital in that city on December 4. He was 51.

Doctor Dauphin, a native of Century, Florida, received his B. S. degree from the University of Alabama in 1942 and was graduated from Hahnemann Medical College of Philadelphia in 1945.

He interned at Hahnemann, and his postgraduate work also included a radiology residency at Hahnemann in 1948-51. Doctor Dauphin was certified by the American Board of Radiology in diagnosis and therapy in 1952.

He was a member of the Parkersburg Academy of Medicine, the West Virginia State Medical Association and the American Medical Association; and served in the U. S. Army Medical Corps for 23 months in 1946-48, holding the rank of Captain.

Doctor Dauphin is survived by his widow; a son, Jim, and a daughter, Lynne, both college students; a brother, J. M. Dauphin of Marshall, Texas, and a sister, Mrs. J. B. Swift, Jr., of Atmore, Alabama.

CHARLES G. MORGAN, M. D.

Dr. Charles G. Morgan, who was President of the West Virginia State Medical Association in 1936, died November 29 in Doctors Hospital in Corpus Christi, Texas, at the age of 87.

A native of Jackson County, Doctor Morgan practiced in Moundsville for more than 30 years before moving to Corpus Christi in 1942. At the time of his retirement in 1960, he was on the staff of Spahn General Hospital in Corpus Christi.

Doctor Morgan was a graduate of West Liberty State College and received his medical degree in 1908 from the College of Physicians and Surgeons in Baltimore, Maryland.

He did postgraduate work at Polyclinic Hospital in New York City; and at the New York Postgraduate Medical School and at Tulane University in New Orleans. He served as an Army Lieutenant in World War I.

Doctor Morgan, who also was a former member and President of the Marshall County Medical Society, is survived by his widow, Mrs. Garnet G. Morgan; and two daughters, Mrs. J. Merritt Allender and Mrs. J. Paul Byard, both of Moundsville.

* * * *

JAMES F. VAN PELT, M. D.

Dr. James F. Van Pelt, who practiced in Oak Hill for more than 20 years prior to 1942, died December

(Continued on Page xx)

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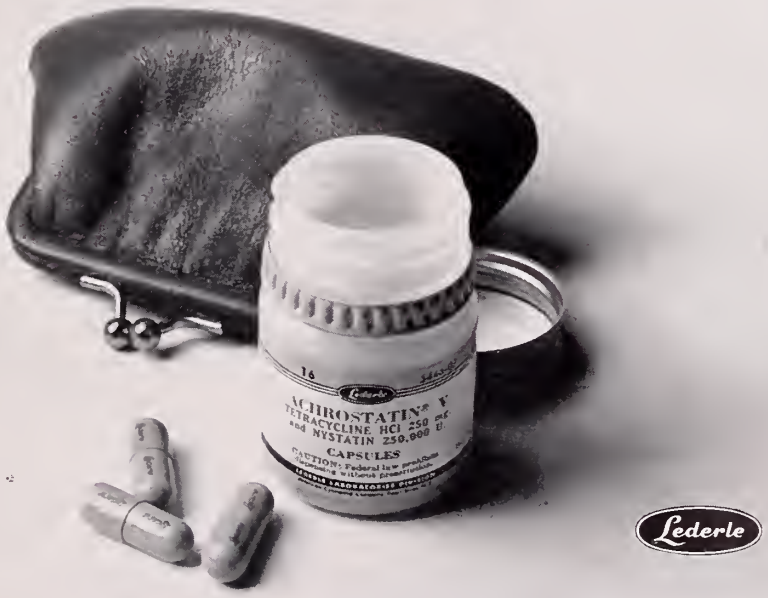

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Friendly Computer Promises Help for Physicians

A county medical society official sees a friendly computer in the future of the nation's doctors. The computer, he says, will almost surely save them time and money while providing machine-like accuracy.

Harry A. Lehman, Executive Secretary of the Jefferson County Medical Society, Louisville, Kentucky, says his group has been successfully using a computer called SAM (Systematic Accounts Management) for a number of years.

Here's what he told a gathering of health insurance and medical men attending the Health Insurance Council's conference on effective utilization of health care facilities and services in Chicago recently.

"SAM works exclusively for physicians and hospitals. He takes over the time-consuming job of patient billings; he furnishes up-to-date, meaningful reports on the doctor's practice; he can increase the collection recovery and establish systematic procedures. He can do all of this at less than the doctor's present cost.

"SAM is young and not tremendously successful yet, but we have a bright picture in our mind for SAM. . . We believe that true accounting will show that the average doctor spends from 50 to 80 cents on the average statement. SAM's charge is 30 cents plus postage.

"We believe SAM is an adaptable, flexible system which will provide good service and economy for the doctor. In addition to the stuffing, addressing, mailing, insertion of additional items, aging of accounts, collection reminders and so forth, SAM will provide and does provide a weekly journal, a monthly age account analysis, a monthly practice analysis, and year-to-date account journal.

"SAM is our pride and joy and at the same time our biggest problem. It is expensive and yet our opinion is that the future in this area is for those who are prepared."

Research Seeks Causes of Gum Diseases

By comparing diseased gum tissue of laboratory animals, it might be possible to identify germs which cause similar diseases in humans, the National Society of Medical Research believes.

Symptoms of diseases, including a severe bone loss, can be induced in laboratory rats that are raised in a germ-free environment by infecting them with bacteria from human pockets. Otherwise, the germ-free animals show only very slow bone deterioration with age.

By comparing tissues in rats reared free of germs throughout their lives with their litter mates infected later with known germs, researchers hope to pick out disease-causing organisms and pinpoint mechanisms by which they destroy the tooth-supporting tissues.

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ACTIONS Each component of Nilcol hos been selected ta pravide symptomatic relief af congestion and cough in upper respiratory disorders.

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HUNTINGTON, WEST VIRGINIA

OBITUARIES—(Continued from Page xviii)

1 in Gulfport, Mississippi, of an apparent heart attack. He was 76.

A native of Woodstock, Virginia, Doctor Van Pelt received his M. D. degree from the Medical College of Virginia in Richmond in 1916, and interned at Sheltering Arms Hospital in Richmond and the Chesapeake and Ohio Railway Hospital in Huntington in 1916 and 1917.

He was a former member of the Fayette County Medical Society and the West Virginia State Medical Association. Survivors include a daughter, Mrs. F. Witcher McCullough of Charleston; and a son, Dr. James F. Van Pelt of Corona, California.

County Societies

McDOWELL

The McDowell County Medical Society held a joint meeting with its Woman's Auxiliary November 11 at the McDowell County Medical Center in Wilcoe.

Dr. J. H. Murry gave a report on pre-school tests and Drs. A. J. Villani and A. A. Carr reported for the Diabetic Committee. Dr. H. Vossoughi was the guest speaker, and provided an interesting talk on his native country of Iran.

The Society elected as its 1971 officers Dr. Robert W. Hansen, President; Dr. Guy Irvin, Vice President; Dr. Louis A. Vega, Secretary, and Dr. Charles F. McCord, Treasurer.—Joseph C. Ray, M. D., Secretary.

* * * *

MERCER

A joint meeting with the Mercer County Bar Association was held by the Mercer County Medical Society on November 16 at the West Virginian Hotel in Bluefield.

Dr. Adney Sutphin gave an interesting talk on factors influencing litigation in job-connected injuries. The Society elected Dr. James T. Godfrey to membership.

Elected as President of the Society for the new year was Dr. R. O. Rogers, with Dr. David Bell chosen as Vice President and Dr. John Mahood as Secretary and Treasurer.—J. J. Mahood, M. D., Secretary.

* * * *

RALEIGH

Fifty-eight members were present as the Raleigh County Medical Society elected Dr. John M. Daniel as its President for 1971 at a November 19 meeting at Henry's Drive In Restaurant in Beckley.

Dr. C. Richard Daniel was named as President Elect and Dr. James A. Gardner was elected Secretary-Treasurer. Dr. Richard Dodds of the U. S. Department of Health, Education and Welfare gave an interesting talk on "Health Maintenance Organizations."—C. Richard Daniel, M. D., Secretary.

Woman's Auxiliary
to the
WEST VIRGINIA STATE MEDICAL ASSOCIATION

President: Mrs. Robert J. Tchou, Williamson
President Elect: Mrs. M. Bruce Martin, Huntington
Vice President: Mrs. Charles Harrison, Clarksburg
Eastern Regional Director: Mrs. Herbert Stelling, Romney
Northern Regional Director: Mrs. Louis W. Groves, Jr., Richwood
Western Regional Director: Mrs. Salvador Diaz, Huntington
Southern Regional Director: Mrs. J. L. Mangus, Charleston
Treasurer: Mrs. Charles E. Andrews, Morgantown
Recording Secretary: Mrs. Harvey Martin, White Sulphur Springs
Corresponding Secretary: Mrs. A. M. MacKay, Forest Hills, Ky.
Parliamentarian: Mrs. William T. Lawson, Fairmont

KANAWHA

Experimental and innovative programs in the Robert F. Kennedy Youth Center in Morgantown were described and explained to the Woman's Auxiliary to the Kanawha Medical Society at a November 17 meeting at Humphrey's Pine Room in Charleston.

The speaker was Mr. Robert Gribben, Acting Executive Assistant at the Youth Center, which was opened in January, 1969. Mr. Gribben said the Center is unique in that it works with first-time youthful offenders in new and experimental ways, with emphasis upon treatment rather than strict discipline.—Mrs. D. Brown Barber, Publicity Chairman.

* * * *

MERCER

Two officers of the Woman's Auxiliary to the West Virginia State Medical Association spoke at a November luncheon meeting of the Woman's Auxiliary to the Mercer County Medical Society at the Y Center in Bluefield.

Mrs. Robert J. Tchou of Williamson, President of the State Auxiliary, outlined her organization's objectives for the next several months and commended the Mercer group on its community efforts.

Mrs. J. L. Mangus of Charleston, Southern Regional Director for the Woman's Auxiliary, explained her role in liaison efforts between the state and county auxiliary levels, and urged the Mercer group to call upon her for any help she might be able to provide.—Mrs. J. E. Blaydes, Jr., Publicity Chairman.

* * * *

PARKERSBURG ACADEMY

Four student nurses at the West Virginia University Branch in Parkersburg have been awarded $100 scholarships by the Woman's Auxiliary to the Parkersburg Academy of Medicine, the group was told at a November meeting at the home of Mrs. Q. Santiago.

Twenty-seven members and three guests attended the meeting. Mrs. Robert Howes, who announced the scholarship awards, said that the four were chosen on a criteria of need and scholarship from among 68 applicants.—Mrs. Lewis D. Telle, Publicity Chairman.

* * * *

RALEIGH

The Woman's Auxiliary to the Raleigh County Medical Society plans to use more than $500 realized from its November 16 International Gourmet Display and Sale at the Beckley Hotel in Beckley for purchase of recreational equipment for young patients at Pinecrest Sanitarium; the Scott Avenue Playground, and the YMCA Pool Fund.

Members of the Auxiliary were guests of the Raleigh County Medical Society at a dinner-dance December 6 at the Black Knight Country Club in Beckley. This has become an annual affair.—Mrs. John E. McKenzie, Press Chairman.

College of Cardiology Sets Session for February

The American College of Cardiology (ACC), an international medical organization of physicians and surgeons specializing in cardiovascular diseases, will hold its 20th Annual Scientific Session in Washington, D. C., February 3-7. Scientific sessions are scheduled for both the Sheraton-Park and Shoreham Hotels.

Research reports to be given will cover such areas of interest as electrophysiology, transplantation and the artificial heart, coronary disease, acute myocardial infarction, congenital heart disease, cardiovascular drugs, pacemakers, sudden death and the use of digitalis.

Other highlights on the program are the Controversies in Cardiology Symposium, the Young Investigators Awards Competition, a full day of cardiac clinics at Washington, D. C., area hospitals and more than 300 scientific and technical exhibits.

Relation of Environment To Old Age Studied

Old age may be more directly related to environmental factors than we think, the National Society for Medical Research believes.

Researchers at the University of Notre Dame are measuring effects of chemical, physical and biological agents found in our environment upon tissue deterioration in laboratory rats.

Examples of such agents might include bacteria, viruses, air pollutants, pesticides, smoke, radiation and excessive sunlight. Such hallmarks of aging as pneumonia, nephritis, malignant tumors and lesions of the skeletal muscles, heart and arteries are appearing in conventional laboratory rats at about two years, but of 61 two-year-old germfree rats examined so far, none show these degenerative changes.

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AVAILABLE—Excellent opportunity for single or group medical practice in furnished or unfurnished space in well located Professional Building in Huntington. Address all inquiries to Management, Suite 204, 1139 Fourth Avenue, Huntington, W. Va. 25701.

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WANTED—General practitioners, internists, some specialists in New Martinsville, W. Va. County seat with 7,000 population. Drawing area encompasses four counties, approximately 30,000. Six stable, medium to large industries. Progressive community, growing, a good place to live and raise a family. Existing hospital with 80 beds and expect to start construction on new acute care hospital in 1971. Local funds raised. Well worth investigation. Contact Dr. C. P. Watson, Secretary, Wetzel County Medical Society, 182 Maple Avenue, New Martinsville, W. Va. 26155.

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FOR SALE—Medical Building and equipment of recently deceased physician. Interested physicians should contact Mrs. George W. West, 131 Lafayette Street, St. Marys, West Virginia 26170.

FOR RENT—Office space directly across from Herbert J. Thomas Memorial Hospital in South Charleston 1,800 square feet with central air-conditioning. Contact Dr. Richard C. Rashid, 424 Division Street, South Charleston, W. Va. Phone 768-7371.

WANTED—Authenticated cases of "storm door" injuries, especially lacerations from falling through or running through storm door glass. Information may be used to influence legislation requiring nonbreakable storm doors in housing. Please send patient's home town, age, date and types of injuries to Dr. Thomas C. Wilson, Emergency Room, Raleigh General Hospital, Beckley, West Virginia 25801.

WANTED—Pediatricians and family physicians, OEO Rural Health Program. Practice limited to hospital and clinics. Salary, $22,000 to $24,000. Fringe benefits. Write Medical Director, Mountaineer Family Health Plan, Inc., Box 1149, Beckley, W. Va. 25801.

WANTED—An internist and one or two general practitioners in Grafton. New hospital under construction, new school funded, new and extensive recreational facilities and new industries. Opportunity unlimited for industrious and qualified physicians. Located 26 miles from WVU Medical Center. Contact Dr. Wallace B. Murphy, Chief of Staff, Grafton City Hospital, Grafton, W. Va. 26354.

AVAILABLE—Medical office, 3,500 square feet and fully equipped and furnished. Air-conditioned and wall to wall carpeting. Complete x-ray and laboratory furnished. Contact W. Paul Bradford, 1201 Fifth Street, Moundsville, W. Va. Phone: (304) 845-1350 or 845-4008.

FOR RENT—Office space directly in front of the emergency room at Herbert J. Thomas Memorial Hospital, 428 Division Street, South Charleston 25309. 1,200 square feet. Contact Dr. James E. Boggs (Phone: 346-5737) or Dr. Ralph J. Holloway (Phone: 768-7368).

WANTED IMMEDIATELY—General practitioner for a modern 40-bed well-equipped hospital. Income limited only by desire and ability. Write or call Administrator, Hampshire Memorial Hospital, Romney, W. Va. 26757. Phone (304) 822-3514.

WANTED—General practitioner or internist to join established partnership general practice. Local hospital, population 3,000, county seat with drawing area of 27,000. Twenty-five miles from University Medical Center. Drs. Davis & Gainer, 410 East Main Street, Kingwood, W. Va. 26537. Phone (304) 329-0780 collect.

WANTED—Board certified internists or those in the process of obtaining certification. If you qualify, please write Lonnie L. Crane, The Myers Clinic, Philippi, W. Va. 26416.

WANTED—GP for Northern West Virginia town of 3,000. Good schools, recreational facilities and shopping. Fifteen-minute drive from hospital. Excellent practice opportunity. Contact Mr. Claud C. Kendall, 12 Jefferson Street, Mannington, W. Va. Telephone: 986-1242.

AVAILABLE—Physician seeking full or part-time employment in clinic, hospital or as associate in practice. Licensed in West Virginia. Contact EWF, The West Virginia Medical Journal, Box 1031, Charleston, West Virginia.

PHYSICIANS WANTED—Due to death and retirement, general practitioners and all varieties of specialists are needed in Clarksburg area. Financial help provided. Contact Dr. Herman Fischer, Recruitment Committee Chairman, 224 W. Olive Street, Bridgeport, W. Va. 26330.

WANTED—A general practitioner to locate in the growing town of Fort Ashby (Mineral County) West Virginia, situated to serve the communities of Short Gap, Springfield and Green Spring. Excellent opportunity for an ambitious physician. For information on possible assistance in establishing office facilities, contact Doctor Committee, Fort Ashby Lions Club, Fort Ashby, W. Va. 26719.

OB-GYN RESIDENCY — Approved three-year program. Position available for first year. A program designed to prepare for complicated obstetrics and general gynecologic surgery. Abundant indigent experience. Active education programs in the other departments. Contact Director of Medical Education, Memorial Hospital, 3200 Noyes Avenue, Charleston, W. Va. 25304.

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WANTED—Internist urgently needed in a growing northeastern West Virginia community; drawing area is approximately 23,000; modern hospital with excellent facilities; office space available; guaranteed annual income; centrally located for vast recreational facilities. Write RLH, The West Virginia Medical Journal, P. O. Box 1031, Charleston, W. Va. 25324.

WANTED—Physician wanted to staff emergency room in a new hospital in Princeton. Progressive and growing community with many recreational facilities in the area. Contact the Administrator, Princeton Memorial Hospital, 1332 Mercer Street, Princeton, W. Va. 24740.

His wife has a lot of different menopausal symptoms, but only a few really irritate *him*. Her hot flashes, her vertigo, her palpitations—that's *her* problem. What really bothers him is her nervousness, her irritability and her excessive anxiety, often expressed by endless "book-shuffling, chain-smoking, reading-lamp" insomnia!

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Management of manifestations generally associated with the menopausal syndrome—anxiety and tension, vasomotor complaints and hormonal deficiency states.

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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Exclude other possible causes of menopausal syndrome manifestations, such as pregnancy. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) similar to those seen with barbiturates have been reported following discontinuance of chlordiazepoxide HCl. Potential benefits of use in pregnancy, lactation or women of childbearing age should be weighed against possible hazards to mother and child. Clinical data inadequate on safety in pregnancy.

Precautions: In elderly and debilitated patients, limit dosage to smallest effective amount of chlordiazepoxide (initially 10 mg or less per day) to preclude ataxia or oversedation; increase gradually as needed and tolerated. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects—particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in patients with impaired renal or hepatic function. Paradoxical reactions to chlordiazepoxide (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in the treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation very rarely reported in patients receiving Librium® (chlordiazepoxide) and oral anticoagulants.

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FEBRUARY
1971

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Member 1971

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References:
1. Duvoisin, R. C., *et al.*: *Trans. Amer. Neurol. Assoc.*, *94*: 81, 1969.
2. Cotzias, G. C.: *J.A.M.A.*, *210*:1255, 1969.

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Proper Nutrition Essential For Expectant Mothers

In recent years, there has been increased concern about the importance of adequate nutrition for prospective mothers. Good nutrition is known to be necessary for the proper development of the fetus and is vitally important in protecting the health of the mother during the prenatal period, which is a time of great physiological stress.

"This concern about the importance of good nutrition during pregnancy," says Dr. N. H. Dyer, State Health Director, "has been evident for many years but has received increased emphasis in recent years." Dr. Genevieve Stearns, speaking at a symposium on "Nutrition in Pregnancy," sponsored by the Council of Foods and Nutrition of the American Medical Association in 1957, made the following statement. . . . "The best provision for well-being in any period of life is to arrive at that point in good nutritional and physical status. The well-born infant is sturdier throughout infancy than the baby poorly born; the sturdy infant has stores to give impetus to growth in the preschool years. The child who is in excellent nutrition will have stores to be drawn upon during the rapid growth at puberty. The well-nourished mother can nourish her fetus well; therefore, the best insurance for a healthy infant is a mother who is healthy and well nourished throughout her entire life, as well as during the period of pregnancy itself."

The Committee on Maternal Nutrition of the National Research Council's Food and Nutrition Board was assigned the responsibility for evaluating the role of diet and nutritional factors in pregnancy. The report of this Committee was recently published under the title: *Maternal Nutrition and the Course of Human Pregnancy*, and is available from the Publications Office, National Academy of Sciences, National Research Council.

Doctor Dyer says that the report indicates anemia is the most common complication of pregnancy. Currently available data indicates that women in the United States do not consume enough dietary iron to provide for the increased amount of this nutrient needed during pregnancy. Thus this Committee has recommended the prescription of a daily supplement of 30 to 60 milligrams of iron during the second and third trimesters of pregnancy.

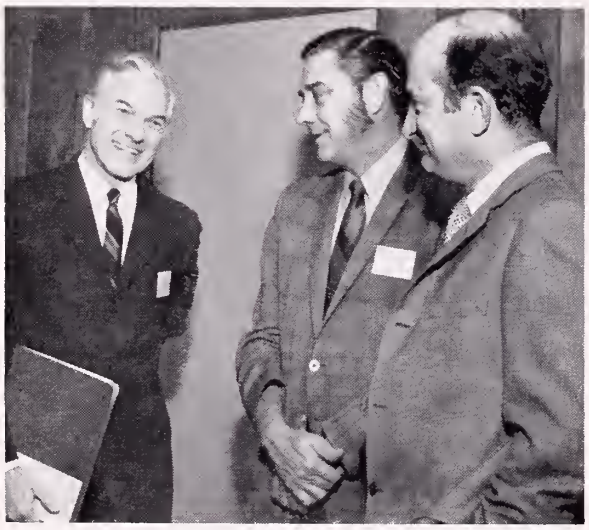
Other recommendations of this Committee, aimed at assuring improved nutritional status of prospective mothers, include: (1) use of the National Research Council's Recommended Dietary Allowance as adapted for pregnancy; (2) encouragement of an average total weight gain of 24 pounds during pregnancy; (3) gradual but progressive weight gain, monitored throughout pregnancy; (4) caution in caloric restriction and limitation of weight gain as routine practices in prenatal care; (5) more attention to the pregnant adolescent, to assure providing adequately for her greater needs for calories, protein, calcium and iron, and (6) prescription of salt restriction and diuretics only when medically justified.

WVU Medical Center
–News–

THE West Virginia University School of Medicine's Department of Behavioral Medicine has expanded its outpatient services to include marriage counseling.

The Department, in cooperation with the College of Human Resources and Education, began in mid-January to offer this new service through University Hospital's outpatient facilities.

The couples benefiting will not be patients. Instead, they will be regarded as clients concerned with mending their marriages through helpful counseling.



Dr. Frank McKee (left), Dean of the West Virginia University School of Medicine, chats with Dr. Donald Cunningham (center) of St. Albans and Dr. A. Thomas McCoy of Charleston during a social hour which preceded a banquet of the School's Alumni Association in Morgantown.

Co-directors of the clinic, Dr. Donald C. Carter, Associate Professor and Director of the Behavioral Medicine Section of University Hospital's Outpatient Department, and Dr. Barbara James, Associate Professor of Clinical Studies in the College of Human Resources and Education, are supervising the counseling, launched initially by two WVU doctoral candidates in counseling and guidance, Mrs. Fran Stillman and Mrs. Martha Moore. All faculty and facilities of the Department of Behavioral Medicine will be utilized.

Eventually, the service also will provide clinical experience for students in the medical specialties and the social and behavioral sciences.

A psychiatrist, Doctor Carter was graduated from the University of Nebraska College of Medicine. Before coming to WVU in 1968, he was on the faculties of the Duke University and University of Missouri Schools of Medicine. In addition, for five years he was Medical Director of the Central Minnesota Mental Health Center in St. Cloud.

• **Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.**

Doctor Carter's primary area of clinical interest in recent years has been the disturbed marital relationship secondary to mental disorder in one of the partners. Of the new marriage counseling clinic and practicum, however, he says, "We hope that people who do not consider themselves abnormal will feel free to come. Our main service will be to couples whose problem is centered around the marriage relationship rather than around intrapsychic difficulties. We want to offer preventive as well as corrective therapy."

Charges, to be handled by the hospital's Professional Fee Office, will be on a sliding scale.

Doctor James, who is certified both as a marriage counselor and as a supervisor of trainees in marriage counseling, brings additional expertise to the program. She received the Ph. D. degree in Child Development and Family Relations from Florida State University, and has had a year of post-doctoral training in marital counseling at the University of Minnesota. She joined the WVU faculty in 1968.

Scientific Papers

Dr. Norman J. Lass, otolaryngology, presented a paper entitled "Rate Alteration Patterns in Oral Reading" and served as chairman of a technical session on "Oral Sensation and Perception" at the recent 46th Annual Convention of the American Speech and Hearing Association in New York City. Co-author of the paper he presented was Miss Jodelle F. Deem, graduate student in speech pathology-audiology.

Department of Medicine faculty members who participated in the Tri-State area meeting of the American College of Physicians in Cleveland, Ohio, were Drs. Edmund B. Flink, Paul Davidson and Reverdy H. Jones, Jr. Doctor Flink, ACP Governor for West Virginia, presided at the third session. Doctor Davidson's topic was "Reactive Hypoglycemia: The Right Diagnosis and the Wrong Basis" and Doctor Jones discussed "Idiopathic Hypertrophic Subaortic Stenosis: Clinical Review and Presentation of Three Cases." Dr. John E. Jones, medicine, was a member of the program committee.

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The Month in Washington

• From the Washington Office of the American Medical Association.

THE federal government now has the authority to expand the U. S. Public Health Service to provide direct medical and other health care services in ghettos and rural areas where there are shortages of physicians and other health personnel.

Before such a program can be started, the state and local medical society must certify that it is needed.

The Senate approved the authorizing legislation, 66 to 0, and the House by an almost unanimous voice vote. President Nixon signed it into law on December 31 although the Secretary of Health, Education and Welfare, and the PHS Surgeon General had asked Congress to defer action until the President had presented his overall health program early this year.

The legislation authorized $10 million for the current fiscal year ending next June 30, $20 million for fiscal 1972 and $30 million for fiscal 1973. The money must be appropriated before it is available for the program.

In its report approving the legislation, the House Commerce Committee expressed a hope that it would help revitalize the PHS which the Nixon Administration reportedly has been planning to further downgrade, or even eliminate, in a reorganization of the health activities of HEW.

"That the Public Health Service has been allowed to languish, and that the great functions it has performed have largely been stripped from it, is the fault of this and previous administrations, and a tragedy from the standpoint of the nation's health needs," the Committee report said.

Physicians enlisting in the program will become PHS commissioned officers and, as such, be exempt from the military draft. Fees paid for their services will be set by the HEW Secretary and go into the U. S. Treasury.

The HEW Secretary has the responsibility of determining, after consultation with local officials and health groups, what areas need such a program. He then can assign PHS personnel there after receiving a request from a state or local health agency or other public or nonprofit private health organization, and a certification of need from the state and local medical society.

The new law—the "Emergency Health Personnel Act of 1970"—also provides for the establishment of a 15-member National Advisory Council on Health Manpower Shortages. It will include three members from the health professions, three members from state health or health planning agencies and four from the general public representing consumers of health care.

HEW Appropriation Up

Congress appropriated for the Department of Health, Education and Welfare more than $300 million more for the current fiscal year (1971) for its health programs, other than Medicare and Medicaid, than was requested by the Nixon Administration.

The appropriation approved by Congress was a compromise between House and Senate figures and represented increases over Administration allotments with the exception of the two for the Food and Drug Administration and Comprehensive Health Planning which were the amounts requested—$89.5 million and $247.1 million, respectively.

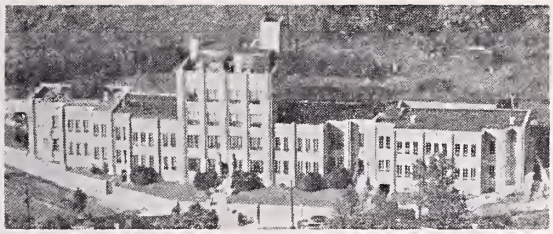
The total HEW appropriation for specific health programs amounted to $739.9 million. The National Institutes of Health appropriation included $275.9 million for health manpower programs, $33.7 million more than asked. The mental health appropriation totaled $379.5 million, a $32.8-million increase. A $196.5-million appropriation for medical facilities construction included a $107.2-million increase. There was a $300,000 increase in the maternal and child health appropriation of $255.6 million.

Health Care for Children

The Nixon Administration has been urged by a "Health Caucus" headed by the American Medical Association's President to give a high priority to health services for children.

The Caucus comprised representatives of the AMA, the Woman's Auxiliary to the AMA, and the American Dental Association at the White House Conference on Children. Dr. Walter C. Bornemeier, President of the AMA, was Chairman.

Stephen Hess, Chairman of the Conference, said he would forward to President Nixon a letter outlining the unanimous views of the Caucus. The letter was accompanied by a resolution on child health care adopted by the House of Delegates at the AMA's 1970 Clinical Convention in Boston.



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Obituaries

EDGAR C. BLUM, M. D.

Dr. Edgar C. Blum, who practiced medicine in New Martinsville for 35 years, died December 16 in Ohio Valley General Hospital in Wheeling of injuries suffered a day earlier in a highway mishap.

Doctor Blum, 61, was a native of Wheeling. He was a graduate of West Virginia University, and received his M. D. degree in 1934 from the Medical College of Virginia in Richmond.

A general practitioner and dermatologist, Doctor Blum was a member of the Wetzel County Medical Society, which he had served as Secretary-Treasurer and as President; the West Virginia State Medical Association, and the American Medical Association.

Doctor Blum is survivied by his widow, Mrs. Helen Schafer Blum; two sons, Thomas E. Blum of New Martinsville and Donald A. Blum, a student at the West Virginia University School of Medicine; a daughter, Mrs. Patricia Blum Tuttle of New Martinsville; and three sisters, Mrs. Norma Jung of Elm Grove, Mrs. Helen Friesenhengst of Cleveland, Ohio, and Mrs. Dorothy Wilson of Belmont, California.

* * * *

J. C. GORDON, M. D.

Dr. J. C. Gordon, a former medical examiner for the Norfolk and Western Railway in Bluefield, died December 20 in Griffin, Georgia, after a long illness. He was 84.

Doctor Gordon was graduated from the University of Tennessee Medical School in Memphis in 1912. He moved from Bluefield to Fort Lauderdale, Florida, in 1947.

A former member of the Mercer County Medical Society and the West Virginia State Medical Association, Doctor Gordon is survived by his widow, Mrs. Ruth Gordon, and one daughter, Mrs. Robert B. Dixon, also of Griffin.

* * * *

M. LAWRENCE WHITE, JR., M. D.

Dr. M. Lawrence White, Jr., 57-year-old thoracic surgeon and a Huntington resident, died December 10 in a hospital in Huntington.

A native of Suffolk, Virginia, Doctor White received academic and medical degrees from the University of Virginia in Charlottesville. He interned at Mason Hospital in Seattle, Washington, in 1937-38 and served his residency in 1941-42 at the University of Michigan.

He moved to Huntington in 1949 to enter private practice after serving as an Assistant Professor of Surgery at the University of Virginia for seven years. From 1942 until 1944, Doctor White was a consultant in thoracic surgery for Pinecrest Sanitarium in Beckley.

(Continued on Page xxii)

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DESCRIPTION	Contents in mg Tablet	Elixir— each 15 ml
phenylpropanalamine HCl	50	25
chlarpheniramine maleate	4	2
glyceryl guaiacolate	200	100
dextromethorphan HBr	30	15
alcohol		10%

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OBITUARIES—(Continued)

A Fellow of the American College of Surgeons, he was a charter member of the Board of Thoracic Surgery and a Diplomate of the American Board of Surgery.

Doctor White was a member of the Cabell County Medical Society, the West Virginia State Medical Association, the American Medical Association and the American Association for Thoracic Surgery.

He is survived by his widow, Mrs. Mollie Kelly White; a daughter, Mrs. John Kirtley of Huntington; two sons, Lawrence White, III, of Morgantown and Macon R. White, serving with the U. S. Army; two stepsons, John and Don W. Kelly, both of Huntington, and a stepdaughter, Mrs. Bonnie K. Kachner of Huntington.

* * * *

CHARLES E. SMITH, M. D.

Dr. Charles E. Smith died at his home in Terra Alta, Preston County, December 23 after a long illness complicated by pneumonia. He was 70.

A native of Evansville, Indiana, Doctor Smith received bachelor of science and medical degrees from the University of Indiana, and served on the staff of Hopemont Sanitarium in Preston County from 1929 to 1934.

He also served briefly, from July of 1960 to January 1, 1961, as that institution's superintendent, but otherwise engaged in the general practice of medicine for 36 years beginning in 1934.

Doctor Smith became a Fellow of the American College of Chest Physicians in 1935, and also was a Fellow of the American Geriatrics Society. He was an honorary member of both the West Virginia State Medical Association and the American Medical Association at the time of his death, and was a Past President of the Preston County Medical Society.

Doctor Smith likewise was a member of the American Academy of General Practice, the American Diabetic Association and the American Heart Association. He had served on medical staffs of hospitals in Grafton, Kingwood and Oakland, Maryland.

Survivors include his widow, Mrs. Ima Grover Smith; one daughter, Mrs. William Canes of Morgantown; two sons, C. E. Smith, Jr., of Weston, and Dr. George T. Smith, Reno, Nevada; and a sister, Mrs. Fern Coker, Evansville, Indiana.

Heart Meeting in Tidewater

The 11th annual Cardiovascular Symposium sponsored by the Tidewater Heart Association, and the American Heart Association's Council on Clinical Cardiology, will be held June 4-6 at the Cavalier Hotel in Virginia Beach, Virginia. The Tidewater Association's offices are in Norfolk, Virginia.

County Societies

MERCER

The Mercer County Medical Society held its annual Christmas Banquet at the Club La Saluta in Bluefield on December 14, and Dr. William M. Bruch, the Society's outgoing President, thanked members of the Woman's Auxiliary and others for their help in arranging the affair.

Installed by Doctor Bruch as the Society's 1971 officers were Dr. R. O. Rogers, Jr., as President; Dr. David F. Bell, Jr., as Vice President; and Dr. John J. Mahood, who will continue as Secretary-Treasurer.—John J. Mahood, M. D., Secretary.

Medical Education Congress Offers Heavy Agenda

The 67th annual Congress of Medical Education, primarily sponsored by the American Medical Association's Council on Medical Education, is scheduled for February 12-15 at the Palmer House in Chicago, Illinois.

The program sponsored by the Council itself will be held on Sunday, February 14, and Monday February 15. Sessions arranged by the Association for Hospital Medical Education and the Federation of State Medical Boards of the United States will be offered on Friday and Saturday, February 12 and 13.

The Sunday morning agenda will include discussions on the development of new medical schools, and American citizens attending foreign medical schools.

Questions centered about the end of internships, and whether specialty boards can respond to change, will be considered on Sunday afternoon.

The control and direction of allied health education, and steps to increase the enrollment of black and other minority students in medical schools, will be discussion topics on Monday morning, February 15.

The Congress then will turn its attention that afternoon to the interdependence of American and international medical education; and how physician distribution might be improved through medical education.

The impact of changes in medical education on prevailing licensure requirements, and whether there is a need for multiple examinations in testing for clinical competence, will be other subjects up for study and review.

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AMA Questions HEW Methods In Medicare Charges

The American Medical Association has expressed concern over arbitrary methods used by the U. S. Department of Health, Education and Welfare to alter the formula by which physicians are reimbursed for their services under Medicare.

HEW, without allowing public discussion, posted in the Federal Register its intent to lower the cut-off, or ceiling, on physician services from an 83rd percentile basis to a 75th percentile basis.

At the same time, HEW also announced it would now take 1969 rather than 1968 as the basis for determining customary physician charges.

The effect is that one action offsets the other, leaving physician payments at much the same level they have been for the past two years, the AMA has insisted. No consideration is given for the increased cost of maintaining a practice, such as salaries for nurses and other personnel; higher premiums for malpractice insurance, and general costs of practicing medicine.

Medicare bases payment on the full physician charge billed if it falls beneath a cut-off point. If the physician bills more, he only receives the cut-off, or ceiling, amount.

The cut-off is determined by a complex method. Surveys are made, locally by locality, of customary fees for a particular service or medical procedure.

To illustrate: say there are 100 physicians in a locality who set broken arms. Ten of these doctors customarily charge $25. Forty of them customarily charge $50. Thirty of them charge $65. Ten charge $80, and the remaining ten charge $100. On a rising scale, the fees ranks this way:

1- 10 customary fees of $25
11- 50 customary fees of $50
51- 80 customary fees of $65
81- 90 customary fees of $80
91-100 customary fees of $100

If an 83rd percentile basis is used, the cut-off fee in this locality would be $80, because the 83rd fee, counting from the lowest to the highest, falls in the $80 bracket. But if the 75th percentile base is used, the cut-off fee would be $65, for the 75th fee would fall in the $65 bracket. Medicare pays 80% of the cut-off (or lower) fee. The patient is responsible for the rest.

In his letter to the U. S. Social Security Administration, Ernest B. Howard, M. D., AMA Executive Vice President, said:

"After two years without any increase, the base of physicians' fees will be moved up to 1969 levels, but the administrative action in reducing the prevailing charge level . . . from the 83rd percentile to the 75th percentile will negate the full effect which the increase in the base should accomplish."

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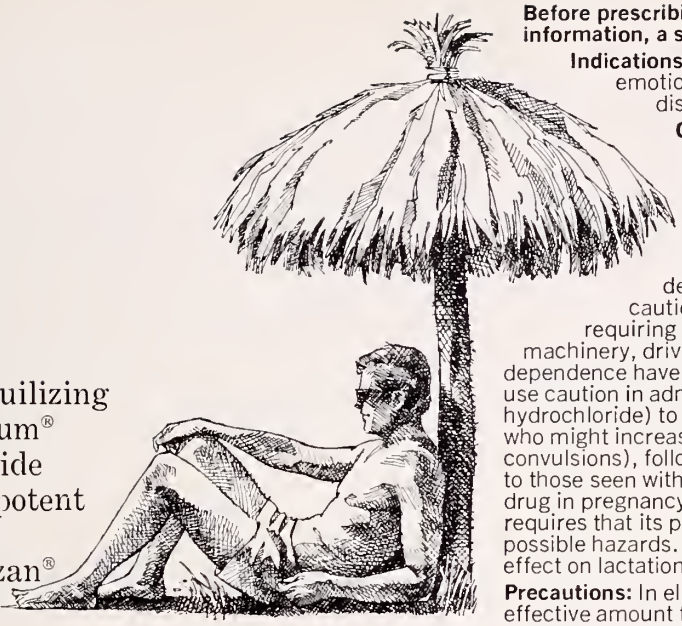

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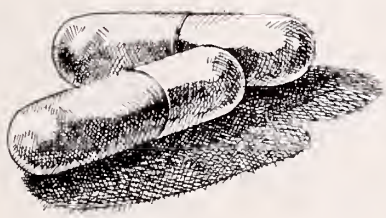

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Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

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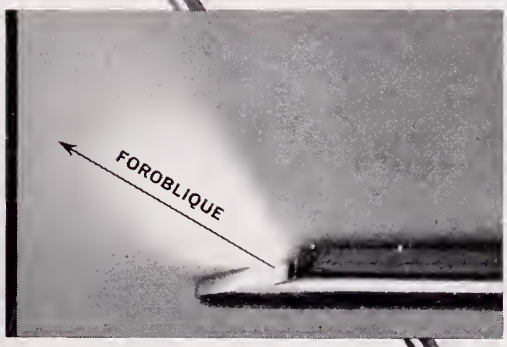

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WVU Medical Center
–News–

• **Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.**

PATIENTS and staff alike have reason to welcome recent additions in the West Virginia University Medical Center's Department of Radiology. Both groups benefit from an acquisition of more sophisticated instrumentation, from the rejuvenation of the cobalt unit, and from a treatment technique new to University Hospital and, in fact, to West Virginia.

Dr. Alptekin Ucmakli, Assistant Professor of Radiology and head of radiation therapy, and R. Harold Galbraith, WVU's radiation physicist, described the innovations and additions.

A scintillation camera, in use since October in the hospital's Nuclear Medicine Section, offers three distinct advantages over previous types of diagnostic scanning—greater speed of procedures, dynamic function studies, and multiple views of an organ with minimal or no manipulation of the patient. A conventional, rectilinear or "straight line" brain scan, for instance, takes 90 minutes; the new camera accomplishes an even fuller study in 30 minutes or less. With so many more studies possible in a day, patients not only save time but also get appointments sooner.

Radioisotope scanning is the most important and easily performed procedure for determining presence of early lesions in such organs as the brain, liver, thyroid, heart, lungs, bone, kidneys. After a radioisotope such as 99m Technetium Compound is injected into a patient's vein, the scintillation camera can immediately begin taking multiple pictures of the brain, for example, to see if there is obstruction to the flow or an abnormal accumulation.

"We don't claim to diagnose what kind," says Doctor Ucmakli, "but with the camera we can tell IF there is a lesion of 1.5 cm. or more in size in the brain, liver, lungs or other organs of the body. We are giving maximum information about pathology of an organ or an area of interest within the human body with minimum time and practically no risk to the patient."

Ambulatory patients can now sit up for the scanning procedures, and the camera's extreme versatility enables technicians to handle seriously sick patients, particularly those with intracranial bleeding, with greater ease.

Thermoluminescent Dosimetry, or TLD, the new radiation measuring system which Mr. Galbraith supervises at University Hospital, has many clinical applications. Use of the system resolves dosimetry problems in radiation therapy since direct measurement is possible under conditions in which other forms of monitoring are not practical. The tiny crystals used in TLD allow patient dose monitoring directly, measurements in body cavities, and a wide range of calibration procedures. They are also rapidly replacing the film badges worn by workers exposed to radiation.

A new ^{60}cobalt teletherapy source has been installed in the hospital's unit in the Radiation Therapy Section. The ^{60}cobalt teletherapy sources decay. Each year, 20 per cent of the activity is lost, so it is usually desirable to provide units with a new source every two years.

Installed in 1968, University Hospital's first source of 3,600 Curies (unit of activity) had decreased to 2,700 Curies in 1970. With its new source, of 7,500 Curies, the hospital's unit treats patients more quickly, and proves especially helpful in pediatric cancer cases, Doctor Ucmakli notes, in preventing restlessness on the Cobalt couch.

The afterloading method for using radium in treating malignant diseases, particularly of women, also was started at University Hospital in October by Doctor Ucmakli. A refined technique for radium insertion, it minimizes personnel exposure problems. Practical application of the new system is being done in close cooperation with the Department of Obstetrics and Gynecology headed by Dr. Walter A. Bonney.

Unloaded applicators are placed into patients in the operating room. Since no radium is handled during this initial procedure, there is no exposure at all to OR personnel and the rush factor has been totally eliminated, giving unlimited time to check and adjust the applicator's position and removing the possibility of any of the patient's organs becoming overexposed.

Actual radium sources are placed in the applicators by the radiation therapist after patients have been taken back to their hospital rooms.

Accurate and proper application of the afterloading method is possible only with the presence on the staff of a fully trained radiologic physicist as well as a radiation therapist and a gynecologist. Because Mr. Galbraith is the state's only resident radiation physicist, University Hospital is the first in West Virginia to use the afterloading method.

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KARL E. WEIER, M. D.
H. F. WARDEN, JR., M. D.
C. D. PRUETT, M. D.
R. O. ROGERS, JR., M. D.

PATHOLOGY
DAVID F. BELL, JR., M. D.
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The Month in Washington

• **From the Washington Office of the American Medical Association.**

PRESIDENT NIXON promised that every effort will be made to keep bureaucracy at a minimum in connection with his new overall national health program even before he disclosed its details.

". . . We do not want the doctors and those in the medical profession to be smothered under a whole, huge bureaucracy and under a great pile of government forms," he said in a speech at the 20th annual meeting of the American College of Cardiology prior to his acceptance of the college's 1971 Humanitarian Award.

President Nixon said he recognized that there is no program for medical care that would be good for the patient unless it is supported by physicians and has the cooperation of the medical profession.

"So we want your advice, we want your cooperation, we want to work together with you in developing a program that will do what is needed to be done and do the best for our patients, your patients, but also that will enable you to meet your responsibilities as unhampered as is possible by federal bureaucracy, red tape and the like," he said.

"That is our objective and I will simply say . . . that as this debate goes on through the year that I know that we will have your cooperation.

"I know the dedicated men and women that are in this profession. And I can assure you that we will listen. We want your advice because, as I said in the State of the Union message, we have one great goal."

In the State of the Union message, the President said:

"As a fourth great goal, I will offer a far-reaching set of proposals for improving America's health care and making it available more fairly to more people.

"I will propose:

"A program to insure that no American family will be prevented from obtaining basic medical care by inability to pay.

"I will propose a major increase in and redirection of aid to medical schools, to greatly increase the number of doctors and other health personnel.

"Incentives to improve the delivery of health services, to get more medical care resources into those areas that have not been adequately served, to make greater use of medical assistants and to slow the alarming rise in the costs of medical care.

"New programs to encourage better preventive medicine, by attacking the causes of disease and injury, and by providing incentives to doctors to keep people well rather than just to treat them when they are sick.

"I will also ask for an appropriation of an extra $100 million to launch an intensive campaign to find a cure for cancer, and I will ask later for whatever additional funds can effectively be used. The time has come in America when the same kind of concentrated effort that split the atom and took man to the moon should be turned toward conquering this dread disease. Let us make a total national commitment to achieve this goal.

"America has long been the wealthiest nation in the world. Now it is time we became the healthiest nation in the world."

In his budget message, President Nixon said he later would send to Congress a message "that will set out a national health strategy for the seventies and propose significant changes in the federal role in the nation's system of health care."

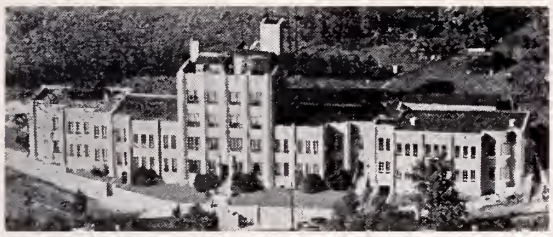
"This strategy will seek to expand preventive care, to train more doctors and other health personnel, to achieve greater equity and efficiency in the delivery of health services," he said. "It will include a new health insurance program for all low-income families with children."

Tighter Government Control

The Nixon Administration asked Congress for tighter government control over any peer review setup for Medicare and Medicaid than would be provided by the so-called Bennett amendment approved by the Senate last year.

Elliot L. Richardson, Secretary of Health, Education and Welfare, told the House Ways and Means Committee:

"We agree with the objective of assuring an expanded role for the medical profession in peer review activities and recognize the need for improvement of utilization review procedures. However, certain modifications in the Senate provisions would be desirable. For example, we do not think that the Secretary of HEW should be required to use medical-society sponsored groups in situations where there may be a highly qualified review organization in the area that has already demonstrated its ability to perform well."



Radiology:
Karl J. Myers, M. D.

Pathology:
Fulvio Franyutti, M. D.

Surgery:
Hu C. Myers, M. D.
A. Kyle Bush, M. D.
T. H. Chang, M. D.

Gynecology and Obstetrics:
Raymond W. Cronlund, M. D.

Internal Medicine:
J. E. Lenox, M. D.
E. G. Guy, M. D.
Y. J. Song, M. D.

Pediatrics:
D. F. Manger, M. D.
E. G. Kreider, M. D.

Anesthesiology:
G. E. Hartle, M. D.

Dentistry:
Glenn B. Poling, D. D. S.

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Obituaries

EUGENE B. WRIGHT, M. D.

Dr. Eugene Bascom Wright, who practiced medicine and surgery in Clarksburg for 40 years before his retirement in 1962, died January 10 after a long illness. He was 89.

A native of Blackstone, Virginia, Doctor Wright was graduated from the University of Maryland School of Medicine in 1909. He spent his internship at the Church Home and Infirmary in Baltimore; was assistant resident and resident in surgery there from 1910 to 1912, and was resident surgeon at Sinai Hospital, also in Baltimore, in 1912 and 1913.

Doctor Wright was a surgeon in the U. S. Army Medical Corps at Fort Oglethorpe, Georgia, and Camp McClellan, Alabama, in World War I.

He was a Fellow of the American College of Surgeons; a member and Past President, in 1937, of the Harrison County Medical Society; and an honorary member, at the time of his death, of the West Virginia State Medical Association and the American Medical Association.

Doctor Wright is survived by a son, Eugene B. Wright, Jr., of Lawrenceburg, Tennessee; and two daughters, Mrs. M. W. Fox of Clarksburg and Mrs. Eugenia Davis of Houston, Texas.

Memory Transfer Envisioned With New Substance

A substance which might enable transfer of a learned memory trait from a conditioned animal to an unconditioned one has been synthesized at Baylor College of Medicine in Houston, Texas.

Dr. George Unger, Professor of Pharmacology at Baylor, said it is the first artificially made substance capable of inducing a specific behavior.

Rodents, such as rats and mice which were used in the experiment, normally prefer a shadowed environment. When conditioned to stay away from the darkened areas, their preferences change. Once this occurs, scientists have found that they can take a certain chemical extract from the rodent's brain, inject it into the brain of a normal animal, and without outside conditioning, it will reverse itself to a fear of the dark.

The Baylor scientists broke the "code" of this extract after two years of study, and have developed the synthetic substance called Scotophobin.

The National Society for Medical Research in Washington reported that Dr. Goetz Domagk of the University of Louvain, Belgium, has also had experience with the material.

New Nilcol- A Comprehensive Formula:

DESCRIPTION	Contents in mg Tablet	Elixir—each 15 ml
phenylpropanolamine HCl	50	25
chlorpheniramine maleate	4	2
glyceryl guaiacolate	200	100
dextromethorphan HBr	30	15
alcohol		10%

The scored, elliptical tablet is light violet. The elixir is deep violet in color and grape-flavored.

ACTIONS Each component of Nilcol has been selected to provide symptomatic relief of congestion and cough in upper respiratory disorders.

Phenylpropanolamine hydrochloride is a vasoconstrictor which reduces congestion of the nasopharyngeal mucosa. Chlorpheniramine maleate, a widely used antihistamine, helps to control allergic symptoms. The expectorant is glyceryl guaiacolate which helps to increase the secretion and decrease the viscosity of fluids of the respiratory tract. Dextromethorphan is a well-known, centrally acting antitussive. Nilcol may minimize the need for topical decongestants.

INDICATIONS Nilcol is indicated for nasal and bronchial congestion; coughs and other symptoms of respiratory infections including influenza and the common cold; other respiratory conditions such as sinusitis, allergic rhinitis or hay fever.

CONTRAINDICATION Hypersensitivity to any ingredient.

PRECAUTIONS Because of the possibility of drowsiness, patients should be cautioned against driving and operating machinery. Administer with caution to patients with hyperthyroidism, hypertensive cardiovascular disease, diabetes mellitus and liver disease. Use in pregnancy is not recommended.

ADVERSE REACTIONS Anxiety, restlessness, tension, insomnia, tremor, weakness, headache, vertigo, sweating, nausea, and vomiting may possibly occur.

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County Societies

CABELL

Dr. Jack O. Sheppe, the Cabell County Medical Society's new President, presented a plaque to his immediate predecessor, Dr. Harold N. Kagan, at the Society's January 14 meeting at Huntington's Frederick Hotel.

The plaque recognized Doctor Kagan's outstanding work as President in 1970. Other new Society officers include Dr. Thomas Scott, Vice President; Dr. Gerald Vanston, Secretary; Dr. Edwin Humphrey, III, Treasurer, and Dr. Winfield John, President Elect.

After disposing of a number of business items, including approval of a $150 appropriation to the Marshall University Science Fair, the Society heard an interesting report by Dr. Thomas Nale, Cabell-Huntington Public Health Director, on a seminar on drug abuse held in Lexington, Kentucky. Doctor Nale reiterated that drug abuse remains an ever-growing problem, particularly among young people.—G. E. Vanston, M. D., Secretary.

* * * *

MERCER

The Mercer County Medical Society voted at a January 18 meeting to sponsor a Medico-Legal Symposium this year. Dr. Hawey Wells, as Chairman; Dr. W. F. Hillier, Jr., and Dr. J. Brennan Purkall, Jr., were named as a committee to work on the project.

Dr. F. T. Edmunds then presented an interesting scientific program on Functional Uterine Bleeding. The meeting was held at Simon's Downtowner Restaurant in Bluefield.—John J. Mahood, M. D., Secretary.

* * * *

MONONGALIA

Dr. James Hugh Wiley presented an interesting paper on "West Virginia Physicians, A Brief Statistical Evaluation," at a January 5 meeting of the Monongalia Medical Society in Morgantown.

Thirty-three members and three guests heard Doctor Wiley outline these conclusions:

West Virginia is producing a sufficient number of physicians to care for its population (one per 711 people) if all doctors remained in the state; however, the state is not presently obtaining the services of enough of those physicians.

The ratio of physicians to population, although slightly behind the national average, has not changed remarkably in West Virginia in the past 10 years; the ratio of foreign medical graduates has increased markedly and is greater than the national average; and the family physician will always exist.

Dr. Thomas Tarnay, President of the Monongalia County Heart Association, found no oppo-

sition among Society members to a pilot project he proposed for the screening of adults for heart disease.—William G. Klingberg, M. D., Secretary.

* * * *

RALEIGH

Discussions of pending legislation related to drug abuse highlighted the regular monthly meeting of the Raleigh County Medical Society January 21 at Henry's Restaurant in Beckley. Forty-eight members and guests were present.

The Society voted to provide $156 to the "Hotline" Project of the Woodrow Wilson High School Key Club in Beckley to cover telephone costs for six months; endorsed in principle a proposed alcoholism treatment program at Appalachian Regional Hospital, and agreed to underwrite subscriptions to *The West Virginia Medical Journal* for students from Raleigh County at the West Virginia University School of Medicine.

Applications by Dr. Ramon C. Jereza and Dr. Lamberto C. Maramba for Society membership were approved unanimously—James A. Gardner, M. D., Secretary.

Change of Address

Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. Notices should be mailed to Box 1031, Charleston, West Virginia 25324.

Woman's Auxiliary

to the

WEST VIRGINIA STATE MEDICAL ASSOCIATION

President: Mrs. Robert J. Tchou, Williamson
President Elect: Mrs. M. Bruce Martin, Huntington
Vice President: Mrs. Charles Harrison, Clarksburg
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Treasurer: Mrs. Charles E. Andrews, Morgantown
Recording Secretary: Mrs. Harvey Martin, White Sulphur Springs
Corresponding Secretary: Mrs. A. M. MacKay, Forest Hills, Ky.
Parliamentarian: Mrs. William T. Lawson, Fairmont

MERCER

Mrs. J. E. Blaydes, Jr., of Bluefield, Mental Health Chairman for the Woman's Auxiliary to the West Virginia State Medical Association, addressed the January meeting of the Mercer County Auxiliary at Bluefield's Y Center.

She gave an interesting review of services and accomplishments of the State Mental Health Association, and outlined plans for a mental health center proposed near Princeton.

Mrs. Edward M. Spencer reported on four talks on medical careers she gave at Fairview School under auspices of the school's guidance program.—Mrs. Carl Barger, Secretary.

OFFICERS OF COMPONENT SOCIETIES

Society	President		Secretary		Meetings
Boone	A. E. Glover	Madison	Harold H. Howell	Madison	2nd Wed.
Brooke	W. T. Booher, Jr.	Wellsburg	W. T. Booher	Wellsburg	
Cabell	Jack O. Sheppe	Huntington	Gerald E. Vanston	Huntington	2nd Thurs.
Central West Virginia	C. R. Davisson	Weston	Joseph B. Reed	Buckhannon	As Sched.
Eastern Panhandle	Robert R. Pittman	Martinsburg	D. Ewell Hendricks	Martinsburg	2nd Wed.
Fayette	Chuan H. Lee	Montgomery	Ivan H. Bush, Jr.	Oak Hill	1st Wed.
Greenbrier Valley	George S. Julias	Wht. Sul. Spgs.	John J. Yaeger	Wht. Sul. Spgs.	2nd Wed.
Hancock	Anthony A. Yurko, Jr.	Weirton	M. J. Packovich	Weirton	2nd Tues.
Horrison	H. M. Brown	Clarksburg	L. Dale Simmons	Clarksburg	1st Thurs.
Kanawha	W. Alva Deardorff	Charleston	George W. Hogshead	Nitro	2nd Tues.
Logan	Edward Gliserman	Holden	Kermit C. Ericsson	Man	2nd Wed.
Marion	Frederick G. Shaffer	Fairmont	G. Thomas Evans	Fairmont	Last Tues.
Marshall	Andrew J. Barger	Glen Dale	Daniel B. Gordon	Glen Dale	3rd Tues.
Mason	John M. Grubb	Pt. Pleasant	Aarom Boonsue	Pt. Pleasant	Bi-Monthly
McDowell	Robert W. Hansen	Welch	Louis A. Vega	Welch	2nd Wed.
Mercer	R. O. Rogers, Jr.	Bluefield	John J. Mahood	Bluefield	3rd Mon.
Mingo	Duane A. Schram	Williamson	William H. Carter	Williamson	2nd Wed.
Monongalia	Hugh Wiley	Morgantown	William G. Klingberg	Morgantown	1st Tues.
Ohio	George R. Clarke	Wheeling	Joseph N. Aceto	Wheeling	4th Tues.
Parkersburg Academy	Edward Shupala	Parkersburg	R. J. Bailey	Parkersburg	1st Thurs.
Potomac Valley	M. F. Townsend	Petersburg	Carl A. Liebig	Keyser	2nd Wed.
Preston	J. C. Arnett	Rowlesburg	C. Y. Moser	Kingwood	4th Thurs.
Raleigh	John M. Daniel	Beckley	James A. Gardner	Beckley	3rd Thurs.
Summers	Jack D. Woodrum	Hinton	J. W. Stokes	Hinton	3rd Mon.
Tygart's Valley	A. E. Harrington	Elkins	A. Kyle Bush	Philippi	3rd Thurs.
Wetzel	Lemoyne Coffield	N. Martinsville	C. P. Watson	N. Martinsville	Monthly
Wyoming	Ernesto Fabi	Mullens	Francisco Flores	Mullens	Quarterly

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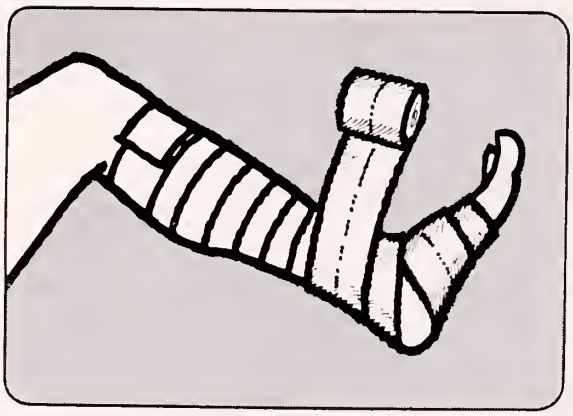

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Book Reviews

HEALERS IN UNIFORM—By Edward Edelson, Senior Staff Writer for Family Health Magazine. Doubleday & Company, Inc., 227 Park Avenue, New York, N. Y. 10017. First Edition, 1971. Pp. 184. Price $3.95.

Edward Edelson is highly qualified as a scientific writer and editor. The author dedicates this small volume to his three children, which gives a clue to its content.

Twelve characters and their great achievements are described and the outstanding are recorded in detail. The volume is for teenagers in my opinion, plainly written, without long unheard of words, and in a style which makes for easy reading and interest. It could be of great interest for the children of physicians or a gift item to any scientific minded child.

The book could be the spark needed to trigger a young mind to study medicine. The character descriptions cannot be found in textbooks. This book is highly recommended. The great works of these 12 men were accomplished while they wore the uniforms of our Armed Forces—C. Frederick Fisher, M. D.

Studies Link Overcrowding To Mental Stresses

Chronic congestion may produce stresses in man that render him incapable of normal behavior, according to the National Society for Medical Research.

The Society added that a variety of recent studies with laboratory animals suggests that a lack of space to maintain privacy and distance from other persons may play an important role in cumulative stresses leading to mental breakdown in some instances.

The statement supports a recent contention by Dr. Milton Greenblatt, Massachusetts Commissioner of Mental Health, that humans may have specific spatial needs for their physical and mental well-being.

Doctor Greenblatt has explained:

"To date, there are practically no studies that relate crowding per se to pathology in humans. True, many studies have related pollution density to psychosomatic symptomatology, neurosis, psychosis, juvenile delinquency, behavioral aberration, and so forth.

"But in these studies, crowding is not differenttiated from associated phenomena, such as low income, inadequate food, and lack of education. It has recently been demonstrated by polygraphic methods that the mere introduction of one individual into the presence of another stimulates a reaction of broad physiologic significance."

"It has also been demonstrated," he said, "that not only the intensity but also the pattern of physiological reaction may vary as well, depending on the instantaneous interpretation by the individual of the whole situation with which he must cope and the specific emotions engendered in relation to the coping reaction."

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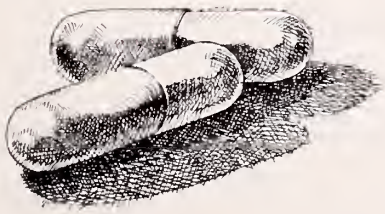

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Contraindications: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide hydrochloride and/or clidinium bromide.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

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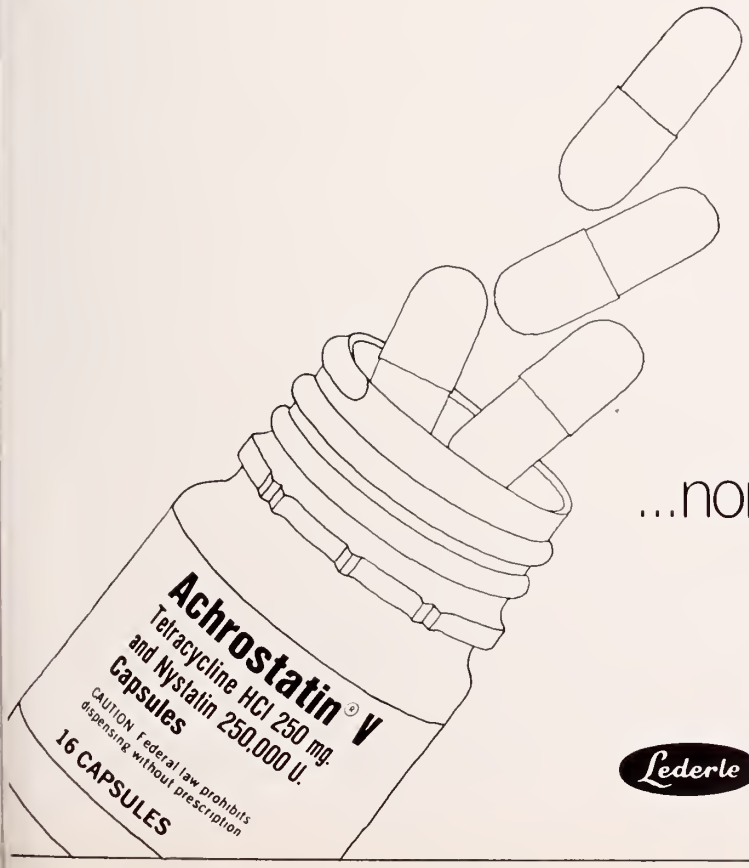

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WVU Medical Center –News–

LAURA Mae Smith, her husband and their three small children live in a rural area of central West Virginia. They like living where they do—the scenery, unspoiled environment and the open spaces for the children to run and play.

While they count these and other advantages in their life, the Smiths realize, too, that there are certain inconveniences. The nearest town is seven miles away and the nearest doctor or clinic 25 miles. There is no bus system near their home and Laura's husband must use the family car weekdays to travel the nine miles to his lumber mill job that provides their modest income.

It's to couples like the Smiths that the West Virginia University Medical Center's family planning program for rural areas brings help.

Although the Smiths have never before practiced family planning they have read some about it in magazines and newspapers. And considering their income, house size and three children all under school age, they are ready to begin—for economic and other practical reasons as well as to protect Laura's health.

In their newspaper the Smiths learn that a series of family planning clinics will be held the following week in their county, one in the community building of the town nearest them.

The newspaper story explains that through the clinics the School of Medicine's Division of Public Health and Preventive Medicine, in cooperation with county agencies of the WVU Extension Service, hopes to provide family planning service to people who, unlike those living in cities, cannot easily obtain them otherwise. The story also outlines the services a clinic visitor is entitled to such as counseling and information about a variety of birth control methods and, for each woman, a painless gynecological examination, pap smear and breast examination, simple clinical tests of blood and urine, and measurement of blood pressure, height and weight.

Examination findings are reported to the patient and if she needs treatment she is given a referral by the doctor to an area physician or health center.

After counseling with a nurse and physician on the clinic team, a woman may select and will be given the birth control method she decides is best for her. If she chooses birth control pills, she will be given a six months' supply. Intrauterine devices (known as IUDs or loops) can be inserted at the clinic and diaphragms and foams, for example, are available as well. Instructions in the rhythm or calendar method are also given to couples who wish to use it.

• **Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.**

Director of the WVU program which is one of the first of its kind in the nation is Dr. Robert L. Nolan, Professor and Chairman of the Division of Public Health and Preventive Medicine. The clinic team headed by Dr. Nicholas W. Fugo, Margaret Sanger Professor of Family Planning in the Department of Obstetrics and Gynecology, includes Dr. Mansoor Mirsaidi, a Department and Division physician specialist; Arlene Sheffield, PHN and Project Administrator; Claire Mailloux, PHN and Clinic Specialist; Marsha Ford, RN, Project Nurse; and Louise Crawford, Project Coordinator.

One of the nurses makes follow-up visits to all patients one week and, again, two months after they come to the clinic. And the clinic itself returns to the county in six months.

Doctor Nolan stresses that helping women to have children, and to have them when they want them, is just as much a part of family planning as helping them to prevent pregnancy. "In the past," he says, "many women remained childless because of the lack of medical information. Today treatment methods are known that will enable such women to have normal children."

Support of local agencies contributes to the success of the clinics. Through advance planning with workers in these agencies, and other community leaders, clinic locations are secured and home visits made to those who, unlike the Smiths, might not have heard or read about the services that are available. Transportation to and from the clinics is provided when needed, and clinic aides even look after children who must accompany their mothers.

The WVU program, financed by the Population Council, Inc., through a contract with the U. S. Office of Economic Opportunity, has reached out to hundreds of rural West Virginia families since its inception in late 1969. So far, clinics have been held in Lewis, Pocahontas, Preston, Randolph, Roane and Upshur Counties, in 13 different locations.

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The Month in Washington

• **From the Washington Office of the American Medical Association.**

THE American Medical Association's 1971 Medicredit national health insurance program was introduced in both chambers of the Congress with more than 100 Democratic and Republican sponsors.

The three chief sponsors again were Sen. Clifford Hansen (R-Wyo.) and Reps. Joel T. Broyhill (R-Va.) and Richard Fulton (D-Tenn.) They and Dr. Russell B. Roth, Speaker of the AMA House of Delegates, held a joint news conference on capitol hill in connection with introduction of the legislation (H. R. 4960 and S. 987).

There are two major differences between this Medicredit legislation and the bill introduced last year. Catastrophic coverage has been added, and the peer review provision dropped because Congress is expected to approve such a program before considering national health insurance.

Medicredit would: (1) pay the full cost of health insurance for those too poor to buy their own; (2) help those who can afford to pay a part of their health insurance premium by providing that the less they can afford to pay, the more the government would help out; and (3) see to it that no American would have to bankrupt himself because of a long-lasting, catastrophic illness.

The government would pay all of the premium for low-income beneficiaries—an individual and his dependents without any income tax liability. For others, the government would provide scaled participation ranging between 97.5 per cent and 10 per cent, favoring lower-income persons, in the payment of premiums for basic coverage. It would pay in full the premium for catastrophic expense coverage, but there would be a "financial corridor" based on income before such coverage would begin.

A beneficiary eligible for full payment of premium by the federal government would be entitled to a certificate acceptable by carriers for health care insurance for himself and his dependents. Eligible beneficiaries with whom the government would be sharing the cost of premium could elect between a credit against income tax or a certificate.

To participate in the Medicredit program, a carrier would have to qualify under state law, provide certain basic coverage, make coverage available without pre-existing health conditions and guarantee annual renewal.

A qualified policy would offer comprehensive insurance against the ordinary and catastrophic expenses of illness. Basic benefits in a 12-month policy period would include 60 days of inpatient care in a hospital or 120 days in an extended care facility. Other basic benefits would provide emergency and outpatient services and all medical services provided by doctors of medicine or osteopathy. The catastrophic expense protection would pay incurred expenses for benefits in excess of the basic coverage, including hospital, extended care facility, inpatient drugs, blood, prosthetic appliances, and other specified services.

Under the basic coverage, there would be a deductible of $50 per hospital stay, and 20 per cent coinsurance of the first $500 of medical expense and on the first $500 of emergency or outpatient expenses. Under the catastrophic illness provisions, the amount of the "financial corridor" would be based on taxable income: 10 per cent on the first $4,000, 15 per cent on the next $3,000, and 20 per cent thereafter.

A health insurance advisory board of 11 members, a majority of whom shall be practicing physicians, and including the Secretary of Health Education and Welfare and the commissioner of internal revenue, would be appointed by the president with Senate consent. The board would establish minimum qualifications for carriers, and in consultation with carriers, providers and consumers, would develop programs designed to maintain the quality of health care and the effective utilization of available financial resources, health manpower, and facilities.

At the news conference, Doctor Roth said:

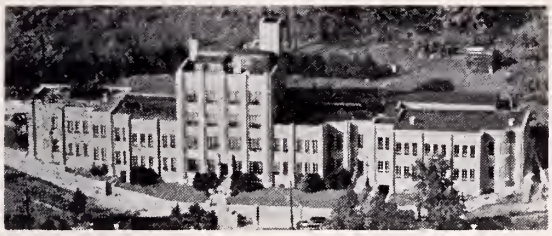
"Medicredit offers four important benefits.

"It protects families and individuals from the financial catastrophe that can result from illnesses requiring protracted care.

"It enables people to receive *federal assistance* for health and medical care.

"It offers an individual or a head of a family, no matter what his income, the opportunity to select from among *private* medical plans the one best suited to his needs.

"And medicredit provides these benefits at a cost estimated at $14.5 billion for the first year—considerably lower than nearly all other national health proposals."



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Obituaries

E. J. HADDAD, M. D.

Dr. E. J. Haddad, a former Beckley pediatrician, died February 23 in Montreal, Canada. He was 47, and death was attributed to a brain tumor.

Doctor Haddad was a native of Lachine in Quebec, Canada, and received both undergraduate and medical degrees from McGill University in Montreal.

He interned at Duke University Hospital in Durham, North Carolina, and received residency training at St. Christopher's Hospital for Children at Philadelphia.

Doctor Haddad began practice in Beckley in 1951 as a specialist in children's diseases and served as pediatrician at Beckley Hospital. He was a member of the Raleigh County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Survivors include a brother, Philip, and a sister, Mrs. Roland D'Avignon, both of Montreal.

* * * *

LUTHER E. REXRODE, M. D.

Dr. Luther E. Rexrode, 47, of Marlinton died in Pocahontas Memorial Hospital at Marlinton on March 1 of a heart attack.

A native of Sugar Grove in Pendleton County, Doctor Rexrode was a graduate of West Virginia University and received his degree in medicine from Baylor University in Houston, Texas, in 1952.

He was a member of the Greenbrier Valley Medical Society; the West Virginia State Medical Association, and the American Medical Association.

Survivors include the widow, Mrs. Myrtle Eye Rexrode; two daughters, Mrs. Sue Carol Sites of Franklin and Mrs. Sandra McElwee of Tallahassee, Florida; Doctor Rexrode's parents, Mr. and Mrs. John Rexrode of Sugar Grove; three brothers, Richard of Fremont, California; Herbert of Winnsboro, South Carolina, and Warren of Sugar Grove; and two sisters, Mrs. Roger Elmore of Roanoke, Virginia, and Miss Mary Chloe Rexrode of Harrisonburg, Virginia.

Mayo Course Scheduled

A continuation course on "Clinical Electroencephalography" will be held September 13-15 in Minneapolis, Minnesota. It will review the principal applications of the EEG to clinical medical practice, and will be sponsored by the American Electroencephalographic Society.

Inquiries about additional course details or registration procedure should be addressed to Dr. Donald W. Klass, EEG Course Director, Mayo Clinic, Rochester, Minnesota 55901.

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County Societies

CABELL

Dr. Robert A. Beargie, Associate Professor in the University of Kentucky Medical School's Department of Pediatrics in Lexington, gave an interesting talk on medical problems of the newborn at the February 11 meeting of the Cabell County Medical Society. The meeting was held at the Hotel Frederick in Huntington.

The Society approved Dr. Leslie Knolle, who is in the practice of surgery at the Veterans Administration Hospital in Huntington, for membership. Letters of condolences related to the Marshall University plane crash of last November, in which three Society members and their wives were killed, were read from the West Virginia Nurses Association; the Kanawha Medical Society, and the medical staff of King's Daughters Hospital in Ashland, Kentucky.

Dr. George F. Woelfel inquired about interest within the society in obtaining malpractice insurance for members. He spoke of anticipated increased resistance by many companies to continuing insurance against malpractice.—Gerald Vanston, M. D., Secretary.

* * * *

MERCER

The Mercer County Medical Society heard an interesting talk by Dr. L. D. Mullins on medical practice in Indonesia at its February 15 meeting at the West Virginian Hotel in Bluefield.

Doctor Mullins said that the best medicine in Indonesia is practiced by Dutch, English and German doctors; that medical schools there are rather poorly staffed, and that there are no real medical textbooks in the local language.

Dr. R. O. Rogers, Jr., the Society President, named Dr. J. B. Taylor as Chairman of a Southern West Virginia Health Council Liaison Committee, on which Drs. P. R. Higginbotham, Frank Holroyd and J. J. Mahood also will serve.

Doctor Rogers also named a Committee on Alcholism on which he will serve along with Drs. John Bryan, L. J. Pace and J. T. Godfrey.—John J. Mahood, M. D., Secretary.

* * * *

MONONGALIA

Dr. Reginald Krause, Professor of Biochemistry at West Virginia University's School of Medicine, gave an interesting talk on "New Information about Vitamin A" at the February meeting of the Monongalia County Medical Society. Thirty-five members were present.

Applications for active membership were accepted from Drs. Delfin V. Simbra, Jr., Chitra Ramanan and Carole Kerr. The application of Dr. William K. C. Morgan also was accepted for courtesy associate membership.—William G. Klingberg, M. D., Secretary.

X-Ray Services Vital Elements In Tuberculosis Control

X-ray technicians and the functions they perform are important elements in the Bureau of Tuberculosis Control's program within the West Virginia Department of Health.

Dr. N. H. Dyer, the State Health Director, has emphasized that many individuals incorrectly believe tuberculosis no longer represents a serious threat to the health and welfare of West Virginians.

X-ray technicians provide two types of services—screening and diagnostic. X-ray screening services are provided to the public through two mobile x-ray units which travel to all counties in the State offering 70 mm. x-rays to persons over 18 years of age. This service is not available to previously known cases of tuberculosis.

Approximately 94,000 of the small x-rays were taken during 1970, from which 3,663 abnormalities indicative of tuberculosis, heart disease, cancer, and other chest diseases were identified. These films are developed and read in the Bureau of Tubrculosis Control.

Diagnostic x-ray services are provided by x-ray technicians who travel to the counties to take 14x17 x-rays for known tuberculosis patients and persons suspected of having tuberculosis. This service is also provided for persons identified with chest abnormalities through the mobile x-ray unit. The technician routinely transports a portable 14x17 x-ray unit which is used in counties where a unit is not available.

These clinics are conducted on a predetermined schedule to insure that physicians have current x-rays for patients seen in the diagnostic clinics. Each year over 13,000 diagnostic x-rays are taken, developed and interpreted. In addition to taking x-rays, the x-ray technicians develop the x-rays and render routine maintenance for the x-ray equipment and the mobile units.

Clerical personnel constitute a vital component of the control program. In addition to routine correspondence and filing, these employees collect, maintain and record data which enables program personnel to assist, recognize and administer to the needs of the patients. Their duties involve making daily entries of x-ray findings, sputum examinations, diagnostic clinic examinations and other pertinent medical data on records of the 3,081 tuberculosis cases currently under medical supervision. X-ray interpretations are transcribed and sent to county health departments. Drugs, skin testing materials and other supplies are distributed and on-site clinical assistance is provided to county health departments.

Administrative personnel are responsible for coordinating activities and ensuring the effective and efficient utilization of personnel and resources.

Doctor Dyer emphasizes that regardless of the services made available and the effort of those who provide those services, the success of the Tuberculosis Control Program is directly related to the attitudes and actions of the average citizen. Infections cannot be identified through x-ray and skin testing programs if persons do not avail themselves of these services. Infections will not be cured or prevented if patients fail to comply with physicians' recommendations for treatment and diagnostic procedures.

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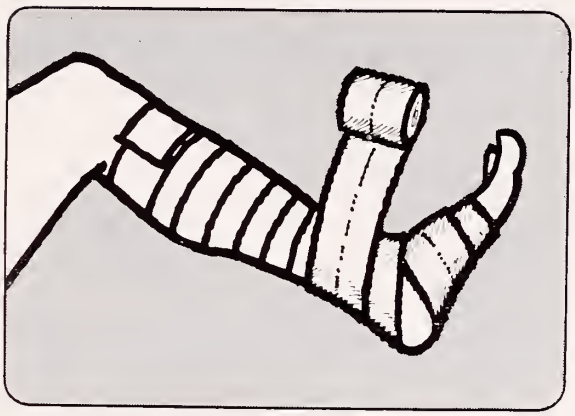

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WANTED: Pediatrician. Excellent opportunity for qualified pediatrician: office space, equipment, staff and minimum first year salary guarantee provided by hospital. Unlimited potential. Call administrator (304) 675-4340, "Collect."

WANTED—Two general practitioners in Marlinton, Pocahontas County. A 42-bed general hospital is available. Successful practice practically assured and assistance will be offered in locating office space. Call Mr. S. E. Drumm, Administrator, Pocahontas Memorial Hospital in Marlinton, collect, for particulars (304) 799-4193.

EMERGENCY ROOM PHYSICIAN—Accredited 280-bed progressive general hospital in beautiful Huntington, West Virginia; excellent income and working conditions; contact Assistant Administrator, Cabell Huntington Hospital, 1340 Sixteenth Street, Huntington, West Virginia 25701 or Call (304) 696-6590 "collect."

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WANTED—General practitioners, internists, some specialists in New Martinsville, W. Va. County seat with 7,000 population. Drawing area encompasses four counties, approximately 30,000. Six stable, medium to large industries. Progressive community, growing, a good place to live and raise a family. Existing hospital with 80 beds and expect to start construction on new acute care hospital in 1971. Local funds raised. Well worth investigation. Contact Dr. C. P. Watson, Secretary, Wetzel County Medical Society, 182 Maple Avenue, New Martinsville, W. Va. 26155.

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WANTED—Two general practitioners and a pediatrician to locate in a rapidly growing and extremely progressive community; excellent recreational facilities; within driving distance of the larger metropolitan areas; modern 45-bed general hospital, fully equipped and staffed; qualified general surgeon in residence. Write HRL, The West Virginia Medical Journal, P. O. Box 1031, Charleston, W. Va. 25324.

WANTED—Pediatricians and family physicians, OEO Rural Health Program. Practice limited to hospital and clinics. Salary, $22,000 to $24,000. Fringe benefits. Write Medical Director, Mountaineer Family Health Plan, Inc., Box 1149, Beckley, W. Va. 25801.

WANTED—An internist and one or two general practitioners in Grafton. New hospital under construction, new school funded, new and extensive recreational facilities and new industries. Opportunity unlimited for industrious and qualified physicians. Located 26 miles from WVU Medical Center. Contact Dr. Wallace B. Murphy, Chief of Staff, Grafton City Hospital, Grafton, W. Va. 26354.

WANTED IMMEDIATELY—General practitioner for a modern 40-bed well-equipped hospital. Income limited only by desire and ability. Write or call Administrator, Hampshire Memorial Hospital, Romney, W. Va. 26757. Phone (304) 822-3514.

WANTED—Board certified internists or those in the process of obtaining certification. If you qualify, please write Lonnie L. Crane, The Myers Clinic, Philippi, W. Va. 26416.

WANTED—GP for Northern West Virginia town of 3,000. Good schools, recreational facilities and shopping. Fifteen-minute drive from hospital. Excellent practice opportunity. Contact Mr. Claud C. Kendall, 12 Jefferson Street, Mannington, W. Va. Telephone: 986-1242.

AVAILABLE—Physician seeking full or part-time employment in clinic, hospital or as associate in practice. Licensed in West Virginia. Contact EWF, The West Virginia Medical Journal, Box 1031, Charleston, West Virginia.

PHYSICIANS WANTED—Due to death and retirement, general practitioners and all varieties of specialists are needed in Clarksburg area. Financial help provided. Contact Dr. Herman Fischer, Recruitment Committee Chairman, 224 W. Olive Street, Bridgeport, W. Va. 26330.

WANTED—A general practitioner to locate in the growing town of Fort Ashby (Mineral County) West Virginia, situated to serve the communities of Short Gap, Springfield and Green Spring. Excellent opportunity for an ambitious physician. For information on possible assistance in establishing office facilities, contact Doctor Committee, Fort Ashby Lions Club, Fort Ashby, W. Va. 26719.

WANTED—Internist urgently needed in a growing northeastern West Virginia community; drawing area is approximately 23,000; modern hospital with excellent facilities; office space available; guaranteed annual income; centrally located for vast recreational facilities. Write RLH, The West Virginia Medical Journal, P. O. Box 1031, Charleston, W. Va. 25324.

In summary, Dalmane is useful in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening. It can be used effectively in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep.

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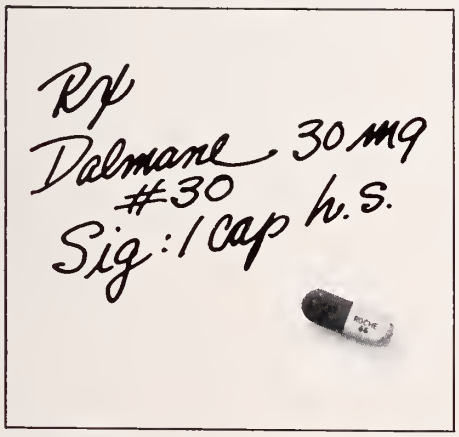
In most instances in which adverse effects with Dalmane were reported, they were mild, infrequent and seldom required discontinuation of the drug. Dizziness, drowsiness, lightheadedness and the like were the side effects most frequently noted, particularly in elderly or debilitated patients.[3] Instances of hepatic dysfunction, paradoxical reactions (excitement) and hypotension are rare with Dalmane, and morning hang-over is relatively infrequent. In studies to date the effectiveness of Dalmane for recommended periods of use is maintained without need to increase dosage.

References: 1. Kales, A., *et al.*: "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. **2.** Kales, A., *et al.*: "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed): *Sleep: Physiology and Pathology*, Phila., Lippincott, 1969, p. 331. **3.** Data on file, Medical Department, Hoffmann-La Roche Inc.



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Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

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Member 1971

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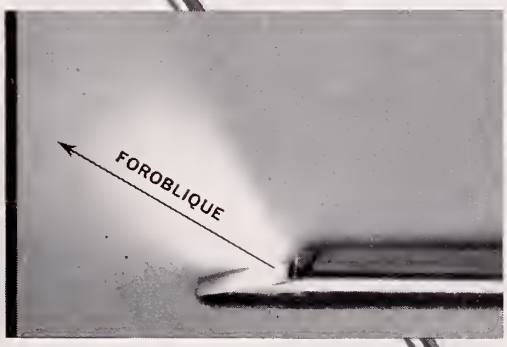

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WVU Medical Center
–News–

• Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.

The West Virginia University School of Medicine has received an $8,000 grant for 1971 from the Deafness Research Foundation in New York City for a research project in otology.

Eligible for annual renewal twice, the grant will be used to support studies by Dr. Philip M. Sprinkle and Dr. Robert Veltri into infectious diseases of the ear. Doctor Sprinkle is Chairman and Professor in the Division of Otolaryngology, and Doctor Veltri is Assistant Professor of Microbiology and Director of Otolaryngic Research.

The Deafness Research Foundation is a voluntary health agency devoted primarily to furthering research into the causes, treatment and prevention of hearing impairment and other ear disorders.

Medical Examiner Speaks

Dr. Milton Helpern, the man the *New York Times* has credited with knowing more about violent death than anyone else in the world, visited the West Virginia University Medical Center on Monday, April 5, to present the annual Alpha Omega Alpha Lecture. New York City's Chief Medical Examiner since 1954, Doctor Helperin's topic was "Investigation of Sudden, Suspicious and Violent Deaths."

Milton Helpern, M. D.

New members of West Virginia Alpha Chapter of AOA honor medical society were introduced before Doctor Helpern's lecture and they, along with the speaker, were honored at an evening banquet at Lakeview Country Club.

A native of New York City and graduate of Cornell University Medical College, where he was elected to AOA, Doctor Helpern received his professional training at New York's Bellevue Hospital. Frequently a guest on radio and television interview and news programs, he also gives approximately 80 lectures each year to professional societies and government, civic and academic groups and is in wide demand as a consultant in pathology and forensic pathology.

Among the most recent of many honors bestowed on Doctor Helpern for his contributions in legal medicine are an honorary Doctor of Law degree from the University of Ghent in Belgium and the 1970 Distinguished Achievement Award from the publication *Modern Medicine*.

His research has included studies of infant survival, narcotic death, operating room deaths, traffic accidents, and the chemical composition of human tissue and organs.

Van Liere Award Competition

Eight WVU medical students presented scientific papers April 2 at the Medical Center in competition for the Edward J. Van Liere Award and two other prizes.

The first prize, an engraved medallion and a $300 cash award, was established in 1965 to honor Doctor Van Liere for his leadership in bringing the School of Medicine to full stature, his devoted interest in undergraduate students and his many scientific achievements. Doctor Van Liere served as Dean of the School of Medicine from 1935 to 1961, and continued as professor of physiology and research professor in obstetrics until 1965 when he became emeritus professor.

Second prize, a cash award of $200, and third prize, a cash award of $100, were added in 1969.

Students presenting papers were John R. Hitt of Richwood, sophomore, "Autoregulation and Critical Closing Pressure of Cerebral Vessels;" Timothy Looney of Alderson, senior, "Hepatic Nucleic Acids and Protein Synthesis in Magnesium Deficiency;" David C. McClure of Morgantown, sophomore, "The Effect of Postganglionic Denervation on the Sensitivity of the Smooth Muscle of the Guinea Pig Vas Deferens to Electrical Stimulation;" Stephen K. Milroy of Richwood, sophomore, "DNA Replication-repair;" H. Gordon Minns of Spencer, junior, "A Method for Obtaining Useful Information About Ionic Conductance Ratios from the Non-Nernstian Behavior of Cell Membranes;" David T. Murray of Spencer, sophomore, "Gardner's Syndrome—Three New Families;" Joel R. Thompson of Mullens, sophomore, "Effect of Hydration on Renal Nerve Activity and Renal Function;" and Peter Kent Thrush of Clarksburg, sophomore, "Microbiological and Immunological Analyses of Head and Neck Cancer Patients."

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The Month in Washington

• From the Washington Office of the American Medical Association.

AMERICAN Medical Association spokesmen have urged that the AMA Medicredit national health insurance program be adopted as the best way (1) to assure, for the nation's poor, access to quality medical care; and (2) to free families with moderate incomes from the fear of bankruptcy resulting from long, costly illnesses.

Dr. Max H. Parrott, Chairman of the Board of Trustees, and Dr. Russell B. Roth, Speaker of the House of Delegates, represented the AMA before the Senate Health Subcommittee at one of its hearings on national health insurance and major health care problems facing the nation.

They estimated the first-year cost of Medicredit at $14.5 billion, much less than some proposals before Congress that would have the federal government virtually take over the nation's health care delivery.

The Medicredit legislation (H.R. 4960 and S. 987) has been introduced in Congress with 131 Democrat and Republican members as sponsors as of about mid-April.

Doctor Roth said that Medicredit, "without disturbing the present Medicare program for the elderly . . . makes available to everyone under 65 a private program of comprehensive medical and health care protection, covering both the ordinary and the catastrophic expenses of illness or accident."

Doctor Parrott warned against legislating revolutionary changes in health care delivery. He urged that innovations be tried on an experimental scale instead.

Health Program Needs

The Chairman of the AMA's Council on Rural Health told the Senate Health Subcommittee that a variety of new health programs are needed to solve the problems of health care in rural communities.

The AMA spokesman, Leopold J. Snyder, M.D., Fresno, California, said some of the new programs already are being tried.

Doctor Snyder explained to the subcommittee that while large segments of people in rural communities have access to quality health care, there are still large segments which do not.

Among the new programs under study by the AMA, he said, are:

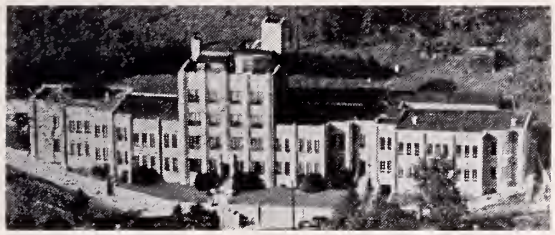
—In Seattle, the University of Washington is providing former medical corpsmen with a three-month refresher course on civilian medical procedures. Upon completion of the course, these former medics are sent to physicians across the state, who have agreed to act as their preceptors, and to employ them after 12 months of on-the-job experience.

—In Lawrence County, Alabama, another project also involves the services of former medical corpsmen. In this Appalachian area, there are only six physicians to serve a population of 30,000. Basically, the project has two modes of patient contact—a family care unit and "out-reach" teams. The outreach teams introduce families to the community health service personnel, who can then begin the history-taking process and refer the family to the family care unit.

—In southern Monterey County, California, a small population is increased to 23,000 by a seasonal influx of migrant farm workers. A group of 10 physicians and 80 supporting ancillary staff members has undertaken to provide medical care to all eligible residents, including migrant farm workers. Patients are cared for in the same facilities, by the same medical staff that serves the self-sustaining members of the community. Transportation—including a van, equipped for wheelchair patients—serves the entire project area. Grantee for the project is the Monterey County Medical Society with funds from the Office of Economic Opportunity.

—Another significant approach may soon be attempted in the wilderness of southwestern New Mexico. This is a 50,000 square mile region of high mountain ranges and portions of the Chihuahua and Sonora Deserts. Some 95,000 inhabitants of the region are served by only three physicians.

The program here calls for a central health center and a series of remote health stations. The stations will be staffed by persons trained in health care, but not as highly trained as a physician. They will be equipped with sensors, similar to those used by the National Aeronautics and Space Administration to monitor the health of the astronauts. Thus, a patient visiting one of the remote health stations will have attached to himself the electronic sensors, which will transmit heartbeat, respiration, blood pressure and other vital data to the computer-controlled center, where a physician would monitor the symptoms and advise the allied health staffer by radio.



Radiology:
Karl J. Myers, M. D.

Pathology:
Fulvio Franyutti, M. D.

Surgery:
Hu C. Myers, M. D.
A. Kyle Bush, M. D.
T. H. Chang, M. D.

Gynecology and Obstetrics:
Raymond W. Cronlund, M. D.

Internal Medicine:
J. E. Lenox, M. D.
E. G. Guy, M. D.
Y. J. Song, M. D.

Pediatrics:
D. F. Manger, M. D
E. G. Kreider, M. D.

Anesthesiology:
G. E. Hartle, M. D.

Dentistry:
Glenn B. Poling, D. D. S.

Broaddus Hospital Resident Staff:
Aristeo E. Villasenor, M. D.
Clyde A. Burgess, M. D.
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Annual Audit, 1970

The annual audit of receipts and disbursements of the West Virginia State Medical Association for the calendar year 1970 has been completed by the firm of Fitzhugh, Erwin, McKee and Hickman, Certified Public Accountants of Charleston. The complete audit, with letter of transmittal, follows:

FITZHUGH, ERWIN, McKEE & HICKMAN
Certified Public Accountants
716 Charleston National Plaza
Charleston, West Virginia 25301

West Virginia State Medical Association
Charleston, West Virginia

We have examined the summary statement of cash receipts and disbursements of the West Virginia State Medical Association and the statements of cash receipts and disbursements by funds for the year ended December 31, 1970, and the statement of securities owned at December 31, 1970. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying summary statement of cash receipts and disbursements and the statements of cash receipts and disbursements by funds present fairly the recorded cash transactions of the West Virginia State Medical Association for the year ended December 31, 1970, and securities owned by the Association at December 31, 1970.

FITZHUGH, ERWIN, McKEE & HICKMAN

Charleston, W. Va.
January 15, 1971

SUMMARY STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS YEAR 1970

CASH IN BANK—JANUARY 1, 1970		$ 32,521.69
RECEIPTS		
State dues	$102,680.00	
Dues collected for A.M.A.	84,420.00	
Commission on collection of A.M.A. dues	845.95	
Registration to post graduate courses	780.00	
Interest on treasury bonds	487.50	
Interest on savings account	1,261.16	
Emblems and frames sold	35.00	
Subscriptions to Journal	964.00	
Advertising	24,478.22	
Exhibit space sold	7,625.00	
Repayment of scholarship awards	1,200.00	
Contributions to Scholarship Fund	545.00	225,321.83
		257,843.52
DISBURSEMENTS		
General Fund	77,573.48	
Medical Journal Fund	44,333.38	
Convention Fund	15,254.73	
Dues forwarded to A.M.A.	84,420.00	
Medical Scholarship Fund	7,220.10	228,801.69
CASH IN BANK—DECEMBER 31, 1970		$ 29,041.83

CASH IN BANK	1-1-70	12-31-70
Savings account	24,833.45	26,094.61
Checking account	7,688.24	2,947.22
	$ 32,521.69	$ 29,041.83

The accompanying letter is an integral part of this statement.

GENERAL FUND

Statement of Cash Receipts and Disbursements Year 1970

BALANCE—JANUARY 1, 1970		$ 42,763.18
RECEIPTS		
Dues (allocated to General Fund)	$ 86,636.25	
Collection commission on A.M.A. dues	845.95	
Interest on U. S. Bonds	312.50	
Post graduate courses	780.00	88,574.70
		131,337.88
DISBURSEMENTS		
Salaries	37,927.75	
Office supplies and expense	4,874.76	
Office rent	6,942.00	
Telephone and Telegraph	2,730.26	
Postage	1,957.26	
Travel	12,426.10	
Mimeographing	784.42	
Expense of Council and Committee meetings	1,798.84	
Rural Health Conference	883.30	
Payroll taxes	1,264.95	
Employee Benefit Plans	2,065.37	
Dues and subscriptions	291.00	
Legal and auditing	874.38	
Office equipment and furnishings	1,908.75	
Miscellaneous expenses	844.34	77,573.48
BALANCE—DECEMBER 31, 1970		$ 53,764.40

Due from Medical Journal Fund	43,216.91	
Due from Convention Fund	13,308.76	
Balance in General Fund checking account	(2,761.27)	
Fund Balance	$ 53,764.40	

The accompanying letter is an integral part of this statement.

MEDICAL JOURNAL FUND

Statement of Cash Receipts and Disbursements Year 1970

BALANCE—JANUARY 1, 1970 (Deficit)		($28,853.00)
RECEIPTS		
Dues (allocated to Journal Fund)	$ 4,492.25	
Advertising	24,478.22	
Emblems sold	35.00	
Subscriptions	964.00	29,969.47
		1,116.47
DISBURSEMENTS		
Salaries	9,299.18	
Office supplies and expense	1,042.12	
Postage	1,232.04	
Printing	30,692.93	
Engraving	1,194.76	
Miscellaneous	872.35	44,333.38
BALANCE—DECEMBER 31, 1970 (Deficit)		($43,216.91)
Due General Fund		($43,216.91)

The accompanying letter is an integral part of this statement.

CONVENTION FUND

Statement of Cash Receipts and Disbursements Year 1970

BALANCE—JANUARY 1, 1970 (Deficit)		($ 9,529.53)
RECEIPTS		
Dues (allocated to Convention Fund)	$ 3,850.00	
Exhibition space sold	7,625.00	11,475.50
		1,945.97
DISBURSEMENTS		
Supplies and labor	7,154.25	
Expense of speakers	5,516.79	
Advance Convention Golf Tournament	250.00	
Auxiliary Convention expense	1,000.00	
Travel	889.87	
Miscellaneous	443.82	15,254.73
BALANCE—DECEMBER 31, 1970 (Deficit)		($13,308.76)
Due General Fund		($13,308.76)

AMERICAN MEDICAL ASSOCIATION DUES

Statement of Cash Receipts and Disbursements Year 1970

BALANCE—JANUARY 1, 1970		$ -0-
RECEIPTS		
Dues collected for A.M.A.		84,420.00

DISBURSEMENTS	
Dues forwarded to A.M.A.	84,420.00
BALANCE DUE A.M.A.—DECEMBER 31, 1970	$ -0-

The accompanying letter is an integral part of this statement.

MEDICAL SCHOLARSHIP FUND

Statement of Cash Receipts and Disbursements Year 1970

BALANCE—JANUARY 1, 1970		$ 28,141.04
RECEIPTS		
Dues (allocated to Medical Scholarship Fund)	$ 7,701.00	
Interest on U. S. Treasury Bonds	175.00	
Interest on savings account	1,261.16	
Contributions	545.00	
Repayment of scholarships	1,200.00	10,882.16
		39,023.20
DISBURSEMENTS		
Travel and miscellaneous expense	220.10	
Scholarship installment	7,000.00	7,220.10
BALANCE—DECEMBER 31, 1970		$31,803.10
Balance in Savings Account		26,094.61
Balance in General Fund Checking Account		5,708.49
Fund Balance		$31,803.10

The accompanying letter is an integral part of this statement.

SCHEDULE OF BONDS OWNED AS OF DECEMBER 31, 1970

	Serial	Due Date	Maturity Value
U. S. Treasury 2½%	27846F	12-15-67-72	$10,000.00
U. S. Treasury 2½%	70011A	12-15-67-72	1,000.00
U. S. Treasury 2½%	70012B	12-15-67-72	1,000.00
U. S. Treasury 2½% (Medical Scholarship Fund)	72361A	12-15-67-72	1,000.00
U. S. Treasury 2½%	22646F	12-15-67-72	500.00
U. S. Treasury 2½% (Medical Scholarship Fund)	6873C	9-15-67-72	5,000.00
U. S. Treasury 2½% (Medical Scholarship Fund)	18939K	9-15-67-72	1,000.00
Series "J"	Q22297J	1- 1-68	25.00
Series "J"	Q22298J	1- 1 68	25.00
Certificate of Deposit 5%	10982	4- 9-69-74	5,000.00
Certificate of Deposit 5%	10981	4- 9-69-74	5,000.00
Certificate of Deposit 5%	10980	4- 9-69-74	5,000.00
Certificate of Deposit 5%	10979	4- 9-69-74	5,000.00
Certificate of Deposit 5%	10978	4- 9-69-74	10,000.00
Certificate of Deposit 5%	10977	4- 9-69-74	10,000.00
Certificate of Deposit 5%	10976	4- 9-69-74	10,000.00
			$69,550.00

COMPARATIVE SCHEDULE OF FUND BALANCES AND BONDS AS OF DECEMBER 31, 1969 AND 1970

	12-31-69	12-31-70	Increase (Decrease)
FUND BALANCES			
General Fund	$ 42,763.18	$ 53,764.40	$ 11,001.22
Medical Journal Fund (Deficit)	(28,853.00)	(43,216.91)	(14,363.91)
Convention Fund (Deficit)	(9,529.53)	(13,308.76)	(3,779.23)
A.M.A. Dues	—	—	—.
Medical Scholarship Fund	28,141.04	31,803.10	3,662.06
	32,521.69	29,041.83	(3,479.86)
U. S. Bonds (at cost)	18,621.92	18,621.92	—
Certificates of Deposit (at cost plus accrued interest)	51,258.83	53,872.33	2,613.50
	$102,402.44	$101,536.08	($ 866.36)

The accompanying letter is an integral part of this statement.

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C. D. Hershey, M. D.
E. C. Voss, M. D.

Ophthalmology:
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M. E. Nugent, M. D.
R. V. Pangilinan, M. D.

Ear, Nose & Throat:
W. A. Tiu, M. D.

Orthopedic Surgery:
C. B. Buffington, M. D.
E. L. Barrett, M. D.

Thoracic Surgery:
Daniel W. Dickinsan, M. D.

Obstetrics and Gynecology:
Robert W. Leibald, M. D.
Robert T. Brandfass, M. D.
Hugh R. Holtrop, M. D.
A. Athari, M. D.

Urology:
D. C. Trapp, M. D.

Dermatology:
H. L. Saferstein, M. D.

Internal Medicine:
Charles H. Hiles, M. D.
Albert M. Valentine, M. D.
James A. Jacob, Jr., M. D.
R. B. Armstrong, M. D.

Psychiatry and Neurology:
Albert L. Wanner, M. D.
Stephen D. Ward, M. D.
David H. Smith, M. D.

Roentgenology:
A. K. Butler, M. D.
J. N. Aceto, M. D.

Speech Pathologist and Audiologist:
James P. Frum, M. S.

Clinical Laboratories:
Kathleen Nickerson

Technologists:
Electrocardiography:
Betty Maguire, R. N.
Electraencephalagraphy:
Joann Green, R. N.
Juanita Stone, R. N.
Raentgenalagy:
Evelyn Farester, R. T.

Administration:
Lester L. Cline, Manager
Henry L. Castilaw, Asst. Mgr.

Gone with the wind

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Stephen T. J. Lee, M. D.
James A. Gardner, M. D.

Orthopedics
Clifford A. Stevenson, M. D.
Jose C. Campa, M. D.
S. A. Zahir, M. D.

Obstetrics-Gynecology
Charles W. Merritt, M. D.
Warren D. Elliott, M. D.
Owen C. Meadows, M. D.
Rabert P. Pulliam, M. D.

Ophthalmology
Edward T. Liu, M. D.

Urology
S. L. Francis, M. D.

Southern West Virginia Clinic

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Beckley, West Virginia 25801

Phone 252-7331

Internal Medicine
Preston C. Davis, M. D.
Joseph A. Maiolo, M. D.
Jose L. Oyco, M. D.
Robert G. Shirey, M. D.
Eugene Warvariv, M. D.
R. James Yates, M. D.

Pediatrics
P. B. Gogo, M. D.
R. G. D. Concepcion, M. D.

Ear, Nose & Throat
P. C. Corro, M. D.

Radiology
Thomas L. Martin, M. D.

Clinic Manager
James P. Bland

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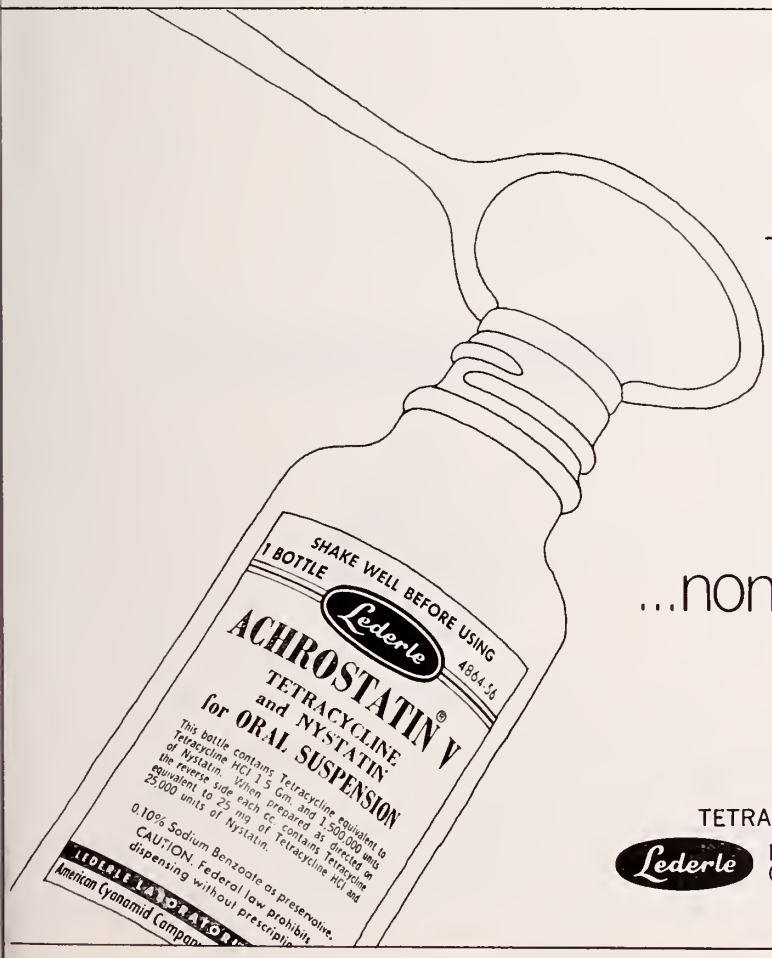

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Obituaries

JOSEPH H. SELMAN, M. D.

Dr. Joseph H. Selman, 63, who had practiced medicine in Charleston for 37 years, died March 28 in Charleston General Hospital after a long illness.

A native of Cleveland, Ohio, and a World War II veteran with service with the U. S. Army Medical Corps, Doctor Selman was graduated from Baldwin-Wallace College at Berea, Ohio, in 1929 and the St. Louis University School of Medicine in St. Louis, Missouri, in 1933.

He was a member of the Kanawha Medical Society, the West Virginia State Medical Associtation, the American Medical Association and the American College of Surgeons.

Survivors include his widow; a son, Joel H., a student at Case Western Reserve University in Cleveland; a daughter, Mrs. James R. Shable of Houston, Texas, and a sister, Mrs. Blanche Polster of Cleveland.

* * * *

EDWARD W. WOOD, M. D.

Dr. Edward W. Wood, 72, died March 18 in a hospital in Lake Worth, Florida, where he had resided for 25 years.

Doctor Wood was a former resident of Beckley, where he was a physician for the C. H. Mead Coal Company before entering private practice.

A graduate of the College of William and Mary at Williamsburg, Virginia, and the Medical College of Virginia in Richmond, Doctor Wood was a former member and Vice President of the Raleigh County Medical Society, and the West Virginia State Medical Association.

He was a veteran of both World War I and World War II military service, and interned at Welch Hospital No. 2 in Welch in 1925-26.

Survivors include the widow; two sons, Dr. Edward H. Wood, a surgeon stationed with the U. S. Air Force in Nebraska and William S. Wood, an attorney in Lake Worth; and a sister, Mrs. Gladys Wood Mangus of Beckley.

WVU Staff Members Certified

Dr. Erwin L. Lunianski, a clinical instructor in Psychiatry at the West Virginia University School of Medicine, is among new Diplomates in Psychiatry of the American Board of Psychiatry and Neurology, Inc. Also certified by the Board recently, in Neurology with special competence in Child Neurology, was Dr. Alexander V. Fakadej, Assistant Professor in both Neurology and Pediatrics at WVU.

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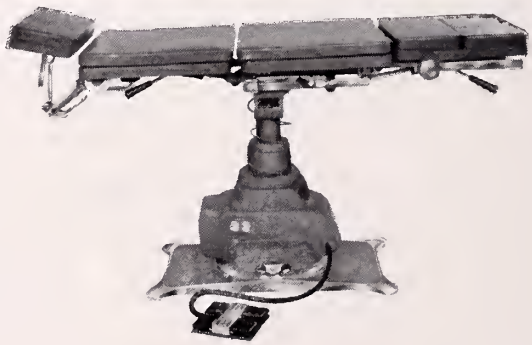

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County Societies

CABELL

Dr. Robert Luke, Associate Professor of Medicine at the University of Kentucky College of Medicine in Lexington, gave an interesting talk on "Acute Renal Failure" at the Cabell County Medical Society's regular meeting March 12 at the Hotel Frederick in Huntington.

The application of Dr. Roland Joseph Viger for membership was approved, and the Society also approved a request by Dr. Boyd Brown to be placed on its honorary list after 50 years of practice in general medicine and anesthesiology.—G. E. Vanston, M. D., Secretary.

* * * *

HANCOCK

The Hancock County Medical Society adopted a resolution at its regular meeting in March supporting a doubling of enrollment of freshman students at medical schools across the country.

The society will send letters to 45 medical schools in support of the published opinion of Donald Lieberman, M. D., of Santa Clara, California, who has proposed that all medical schools double their freshman enrollments as a step toward alleviating the current shortage of physicians.—M. J. Packovich, M. D., Secretary.

* * * *

HARRISON

Mrs. Robert Hess of Bridgeport provided an interesting early history of physicians in Harrison County at a March 4 joint meeting of the Harrison County Medical Society and its Woman's Auxiliary at the Stonewall Jackson Hotel in Clarksburg.

About 40 persons were present. Dr. H. M. Brown, the Medical Society's President, was in charge of the dinner session, and Dr. Ray Harron, the Program Chairman, introduced Mrs. Hess. Her discussion also covered the founding of the West Virginia State Medical Association.—L. Dale Simmons, M. D., Secretary.

* * * *

KANAWHA

President James G. Harlow of West Virginia University offered an interesting talk on "Some Thoughts on Higher Education" at the April 20 meeting of the Kanawha Medical Society. Others attending the meeting included Dr. Charles E. Andrews, Provost of Health Sciences at the West Virginia University Medical Center.—George W. Hogshead, M. D., Secretary.

* * * *

McDOWELL

Dr. George R. Callender, Jr., of Charleston, President of the West Virginia State Medical Association, addressed the McDowell County Medical Society at its March 10 meeting at the Stevens Clinic Hospital in Welch.

Doctor Callender urged his fellow physicians to bill third-party agencies and organizations for usual and customary fees. The meeting also brought discussion of various legislation pending or enacted at the Federal and State levels.

The Society saw an interesting film on depression at its February 10 meeting at Doctors Memorial Hospital in Welch.—J. C. Ray, M. D., Secretary.

* * * *

MERCER

Dr. David Bell of Bluefield gave an interesting talk, illustrated with slides, on construction of the East River Mountain Tunnel when the Mercer County Medical Society held its regular meeting on March 15 at the Dinner Bell Restaurant in Princeton.

Dr. Hawey Wells reported that several lawyers had been appointed to a Medical-Legal Adjudication Review Committee, and that a meeting was planned soon.

The Society elected Dr. John Hatfield to membership.—John J. Mahood, M. D., Secretary.

* * * *

MONONGALIA

Forty-six members were present when Dr. George R. Callender, Jr., of Charleston, President of the West Virginia State Medical Association, addressed the Monongalia County Medical Society on March 2. Doctor Callender gave an interesting talk on various aspects of medicine in West Virginia, including medical economics and pending legislation.

Dr. Stanley J. Kandzari and Dr. Mansoor Mirsaidi were accepted for Society membership, and the Society voted to pay costs involved in providing *The West Virginia Medical Journal* to medical students from Monongalia County.—William G. Klingberg, M. D., Secretary.

New Regulations Introduced In Medicaid Program

New government regulations for Medicaid include a requirement that the physician certify a patient's continuing need for inpatient care on or before the 12th day of hospitalization, and again no later than the 18th day.

Other final regulations issued by the U. S. Department of Health, Education and Welfare give the Internal Revenue Service more power to police income earned under the Medicaid program. States must file annual information returns showing aggregate amounts paid to providers of services identified by name, address and Social Security number or employer number.

"Experience with Medicare has shown that requiring certification or recertification by physicians reduces hospital stays significantly," John Twiname, Administrator of HEW's Social and Rehabilitation Service, said. "Applying this requirement to Medicaid can cut its costs without lowering the quality of care."

Inpatient hospital costs have been accounting for about 40 percent of total Medicaid expenditures, or about 1.9 billion dollars in the fiscal year 1970.

President Nixon Rescinds Liberal Abortion Policy

President Nixon, saying that he personally opposes abortions as "an unacceptable form of population control," has rescinded a Pentagon order liberalizing the policy on abortions in military hospitals.

His statement on abortion, issued recently at the Western White House at San Clemente, California, said:

"Historically, laws regulating abortion in the United States have been the province of states, not the Federal Government. That remains the situation today, as one state after another takes up this question, debates it and decides it. That is where the decisions should be made.

"Partly for that reason, I have directed that the policy on abortions at American military bases in the United States be made to correspond with the laws of the states where those bases are located. If the laws in a particular state restrict abortions, the rules at the military base hospitals are to correspond to that law.

"The effect of this directive is to reverse service regulations issued last summer which had liberalized the rules on abortions at military hospitals. The new ruling supersedes this and has been put into effect by the Secretary of Defense.

"But while this matter is being debated in state capitals, and weighed by various courts, the country has a right to know my personal views.

"From personal and religious beliefs, I consider abortions an unacceptable form of population control. Further, unrestricted abortion policies, or abortion on demand, I cannot square with my personal belief in the sanctity of human life—including the life of the yet unborn. For, surely, the unborn have rights also, recognized in law, recognized even in principles expounded by the United Nations.

"Ours is a nation with a Judeo-Christian heritage. It is also a nation with serious social problems—problems of malnutrition, of broken homes, of poverty and of delinquency. But none of these problems justifies such a solution.

"A good and generous people will not opt, in my view, for this kind of alternative to its social dilemmas. Rather, it will open its hearts and homes to the unwanted children of its own, as it has done for the unwanted millions of other lands."

Doctor Vanston New Cabell Coroner

Dr. Gerald E. Vanston, Huntington pathologist, has been appointed by the Cabell County Court as the county's Coroner to succeed Dr. Paul E. Lett. Doctor Lett has resigned, and has left Huntington to practice in Ashland, Kentucky. A native of Scranton, Pennsylvania, Doctor Vanston is a graduate of Jefferson Medical College in Philadelphia.

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Morgon E. Scott, M. D.
Dovid S. Sprague, M. D.
Edward E. Cole, M. D.

Don L. Weston, M. D.
J. Williom Giesen, M. D.
Delono W. Bolter, M. D.
Dovis G. Gorrett, M. D.

Clinical Psychology:
Thomos C. Camp, Ph. D.
Corl McGrow, Ph. D.
James E. Dublin, Ph. D.
Thomas M. Weddig, Ph. D.

Don Phillips, Administrotor
R. Lindsoy Shuff, M. H. A.
Asst. Administrator

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David M. Wayne, M. D.

109 E. Moin Street, Beckley, W. Va.
Beckley Mentol Health Center
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WANTED—General practitioner to locate in Sistersville, Tyler County. A 19-bed general hospital is available; drawing area is approximately 20,000. Successful practice assured and assistance will be offered in locating office space. Call John L. Moore, Administrator, Sistersville General Hospital, collect, for particulars (304) 657-2401.

WANTED: Pediatrician. Excellent opportunity for qualified pediatrician; office space, equipment, staff and minimum first year salary guarantee provided by hospital. Unlimited potential. Call administrator (304) 675-4340, "Collect."

WANTED—Two general practitioners in Marlinton, Pocahontas County. A 42-bed general hospital is available. Successful practice practically assured and assistance will be offered in locating office space. Call Mr. S. E. Drumm, Administrator, Pocahontas Memorial Hospital in Marlinton, collect, for particulars (304) 799-4193.

EMERGENCY ROOM PHYSICIAN—Accredited 280-bed progressive general hospital in beautiful Huntington, West Virginia; excellent income and working conditions; contact Assistant Administrator, Cabell Huntington Hospital, 1340 Sixteenth Street, Huntington, West Virginia 25701 or Call (304) 696-6590 "collect."

AVAILABLE—Excellent opportunity for single or group medical practice in furnished or unfurnished space in well located Professional Building in Huntington. Address all inquiries to Management, Suite 204, 1139 Fourth Avenue, Huntington, W. Va. 25701.

AVAILABLE—July 1, 1971, Board eligible neurosurgeon interested in solo or partnership practice. Contact CYA, The W. Va. Medical Journal, Box 1031, Charleston, W. Va. 25324. Phone (412) 687-1546.

WANTED—General practitioners, internists, some specialists in New Martinsville, W. Va. County seat with 7,000 population. Drawing area encompasses four counties, approximately 30,000. Six stable, medium to large industries. Progressive community, growing, a good place to live and raise a family. Existing hospital with 80 beds and expect to start construction on new acute care hospital in 1971. Local funds raised. Well worth investigation. Contact Dr. C. P. Watson, Secretary, Wetzel County Medical Society, 182 Maple Avenue, New Martinsville, W. Va. 26155.

WANTED—Two general practitioners and a pediatrician to locate in a rapidly growing and extremely progressive community; excellent recreational facilities; within driving distance of the larger metropolitan areas; modern 45-bed general hospital, fully equipped and staffed; qualified general surgeon in residence. Write HRL, The West Virginia Medical Journal, P. O. Box 1031, Charleston, W. Va. 25324.

WANTED—Pediatricians and family physicians, OEO Rural Health Program. Practice limited to hospital and clinics. Salary, $22,000 to $24,000. Fringe benefits. Write Medical Director, Mountaineer Family Health Plan, Inc., Box 1149, Beckley, W. Va. 25801.

WANTED—An internist and one or two general practitioners in Grafton. New hospital under construction, new school funded, new and extensive recreational facilities and new industries. Opportunity unlimited for industrious and qualified physicians. Located 26 miles from WVU Medical Center. Contact Dr. Wallace B. Murphy, Chief of Staff, Grafton City Hospital, Grafton, W. Va. 26354.

WANTED IMMEDIATELY—General practitioner for a modern 40-bed well-equipped hospital. Income limited only by desire and ability. Write or call Administrator, Hampshire Memorial Hospital, Romney, W. Va. 26757. Phone (304) 822-3514.

WANTED—Board certified internists or those in the process of obtaining certification. If you qualify, please write Lonnie L. Crane, The Myers Clinic, Philippi, W. Va. 26416.

WANTED—GP for Northern West Virginia town of 3,000. Good schools, recreational facilities and shopping. Fifteen-minute drive from hospital. Excellent practice opportunity. Contact Mr. Claud C. Kendall, 12 Jefferson Street, Mannington, W. Va. Telephone: 986-1242.

AVAILABLE—Physician seeking full or part-time employment in clinic, hospital or as associate in practice. Licensed in West Virginia. Contact EWF, The West Virginia Medical Journal, Box 1031, Charleston, West Virginia.

PHYSICIANS WANTED—Due to death and retirement, general practitioners and all varieties of specialists are needed in Clarksburg area. Financial help provided. Contact Dr. Herman Fischer, Recruitment Committee Chairman, 224 W. Olive Street, Bridgeport, W. Va. 26330.

WANTED—A general practitioner to locate in the growing town of Fort Ashby (Mineral County) West Virginia, situated to serve the communities of Short Gap, Springfield and Green Spring. Excellent opportunity for an ambitious physician. For information on possible assistance in establishing office facilities, contact Doctor Committee, Fort Ashby Lions Club, Fort Ashby, W. Va. 26719.

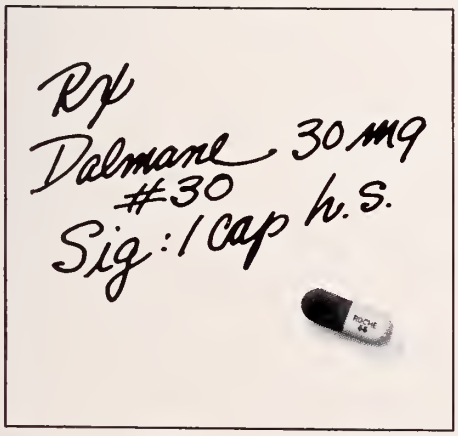
WANTED—Internist urgently needed in a growing northeastern West Virginia community; drawing area is approximately 23,000; modern hospital with excellent facilities; office space available; guaranteed annual income; centrally located for vast recreational facilities. Write RLH, The West Virginia Medical Journal, P. O. Box 1031, Charleston, W. Va. 25324.

In summary, Dalmane is useful in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening. It can be used effectively in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep.

Dalmane (flurazepam HCl) is generally well tolerated

In most instances in which adverse effects with Dalmane were reported, they were mild, infrequent and seldom required discontinuation of the drug. Dizziness, drowsiness, lightheadedness and the like were the side effects most frequently noted, particularly in elderly or debilitated patients.[3] Instances of hepatic dysfunction, paradoxical reactions (excitement) and hypotension are rare with Dalmane, and morning hang-over is relatively infrequent. In studies to date the effectiveness of Dalmane for recommended periods of use is maintained without need to increase dosage.

References: 1. Kales, A., *et al.*: "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. **2.** Kales, A., *et al.*: "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed): *Sleep: Physiology and Pathology*, Phila., Lippincott, 1969, p. 331. **3.** Data on file, Medical Department, Hoffmann-La Roche Inc.



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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

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JUNE
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Member 1971

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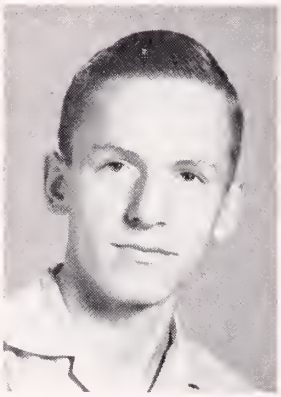
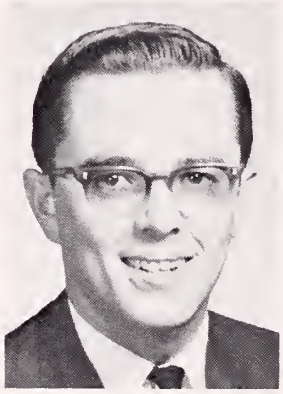
WVU Medical Center
–News–

INTERNSHIPS or residencies will begin July 1 for the 59 men and seven women graduating from the West Virginia University School of Medicine this year.

Recently released results of the National Intern and Resident Matching Program, a computerized system that matches senior medical students and hospitals according to the choices of both, show that the 66 new physicians educated at WVU will intern or begin residencies at 34 hospitals in 17 states, the District of Columbia, and Canada. Twenty-three seniors, almost three times the number from last year's class, chose to continue their training in West Virginia.



Dewey F. Bensenhaver, M. D.



Deleno H. Webb, III, M. D.

Internship openings in the nation's hospitals are almost double the number of eligible applicants from U.S. medical schools.

In this year's graduating class were the 1967 winners of the West Virginia State Medical Association's two annual medical scholarships—Dr. Dewey F. Bensenhaver of Rig, Hardy County, who will intern at Washington, Pennsylvania, Hospital; and Dr. Deleno H. Webb, III, of St. Albans, who will begin a residency in the WVU Hospital Department of Behavioral Medicine and Psychiatry.

Other members of the WVU graduating class in medicine, their home towns and the hospitals where they will take additional training are:

Charles B. Abrams, Pittsburgh, Pa., George Washington University Hospital, Washington, D. C.; Deborah A. Adkins, Barboursville, University of Nebraska Affiliated Hospitals, Omaha; Joel Allen, Charleston, Cincinnati (Ohio) General Hospital; James H. Ashworth, Buckhannon, West Virginia University Hospital Department of Pediatrics, Morgantown; Michael R. Atherton, Shepherdstown, St. Francis Hospital Department of Medicine, Honolulu Hawaii; Harry H. Ballard, Welch, University of Kentucky Medical Center, Department of Medicine, Lexington; James R. Barton, Weston, Roanoke (Va.) Memorial Hospital; David C. Blass, Calumet City, Ill., WVU Hospital Department of Surgery;

J. Conrad Bures, West Newton, Pa., WVU Hospital Department of Pediatrics; Pietro V. Caruso, Clarksburg, Mercy Hospital, Pittsburgh, Pa.; James F. Cipoletti, Jr., Washington, Pa., WVU Hospital Department of Medicine; William Colantoni, Jr., Fredericktown, Pa., Robert Packer Hospital, Sayre, Pa.; Charles B. Cuono, West Caldwell, N. J., WVU Hospital Department of Surgery; Kenneth P. Derbenwick, Riverside, Conn., and Mary F. Derbenwick, McMechen, Mayo Graduate School of Medicine Department of Medicine, Rochester, Minn.; William C. Dressler, Hinton, WVU Hospital Department of Surgery;

James C. Durig, Glendale, Hennepin County General Hospital Department of Medicine, Minneapolis, Minn.; James K. Egnor, Branchland, Memorial Hospital, Charleston; Ronald A. Fawcett, Wheeling, Presbyterian Medical Center, Denver, Colo.; Stephen J. Feaster, Shinnston, WVU Hospital Department of Obstetrics and Gynecology (residency); John A. Francis, Lyburn, Washington (Pa.) Hospital; Ray W. Gandee, South Charleston, Roanoke (Va.) Memorial Hospital; Alfred E. Gibbons, Jr., Morgantown, City of Memphis (Tenn.) Hospital; Richard Gnegy, Oakland, Md., WVU Hospital Department of Pediatrics;

Francis D. Harris, Charleston, Vancouver (B.C.) General Hospital; Richard T. Herrick, New Martinsville, Brackenridge Hospital, Austin, Texas; John A. Jupin, Clairton, Pa., Strong Memorial Hospital of the University of Rochester (N.Y.), Department of Pathology; Perry M. Kalis, Wheeling, Ohio Valley General Hospital Department of Radiology (residency), Wheeling; Margaret E. Kern, Charleston, University of Nebraska Affiliated Hospitals, Omaha; Hamil C. Kessel, Jr., Beckley, Mercy Hospital, Pittsburgh, Pa.; James W. Kessel, Logan, University of Minnesota Hospitals (family practice

• **Compiled from moteriol furnished by Mrs. Mary Ellin Wylie, Director, Medicol Center News ond Information Services, Morgontown, W. Va.**

residency), Minneapolis; Lloyd M. Lamp, Pt. Pleasant, Akron (Ohio) City Hospital; Ted T. Lewis, St. Marys, University of Colorado Medical Center Department of Medicine, Denver;

Josiah K. Lilly, III, Oak Hill, WVU Hospital Department of Surgery; Timothy J. Looney, Alderson, University of Minnesota Hospitals Department of Medicine, Minneapolis; John D. Lyons, Parkersburg, Norfolk (Va.) General Hospital; Emerson S. Mann, Princeton, San Francisco (Calif.) General Hospital; Charles F. Marsh, Santa Rosa, Calif., WVU Hospital Department of Behavioral Medicine and Psychiatry (residency); Thomas E. McCay, Huntington, Akron (Ohio) City Hospital; William T. McClellan, Charleston, Memorial Hospital, Charleston; Russell V. McDowell, Morgantown, Biloxi (Miss.) U.S. Air Force Hospital;

Richard W. McGan, Davy, Washington (Pa.) Hospital; Evelyn H. Melnik, Hemphill, Memorial Hospital, Charleston; Janice E. Milligan, Parkersburg, Massachusetts General Hospital Department of Pediatrics, Boston; Nolan C. Parsons, Jr., Belmont, WVU Hospital Department of Medicine; Phillip J. Peters, Wheeling, WVU Hospital Department of Medicine; Howard T. Phillips III, Wheeling, Mercy Hospital, Pittsburgh, Pa.; Edward P. Polack, Wheeling, Boston (Mass.) University Third Surgical Service; Lee H. Pratt, Vienna, WVU Hospital Department of Behavioral Medicine and Psychiatry (residency);

John T. Samsell, Morgantown, University of Oregon Medical School Hospitals and Clinics, Portland; Ronald R. Scobbo, Port Washington, N. Y., WVU Hospital Department of Medicine; Michael D. Serene, California, Pa., Akron (Ohio) City Hospital Department of Surgery; Meryl A. Severson, II, Minot, N. D., Washington (Pa.) Hospital; Maxwell B. Snedegar, Elkins, Akron (Ohio) City Hospital; Michele A. Stewart, Dayton, Ohio, Lancaster (Pa.) General Hospital; Russell M. Stewart, III, Wheeling, WVU Hospital Department of Medicine; Wade B. Stoughton, Morgantown, WVU Hospital Department of Surgery;

Gregory H. Szeyko, Wilkes-Barre, Pa., Albany (N.Y.) Medical Center Department of Medicine; Mary B. Taylor, Quinwood, Memorial Hospital, Charleston; Daniel D. Upthegrove, Morgantown, WVU Hospital Department of Behavioral Medicine and Psychiatry (residency); John A. Winder, Toledo, Ohio, University Hospital General Department of Pediatrics, Ann Arbor, Mich.; Albert W. C. Young, Hong Kong, Los Angeles County University of Southern California Medical Center Department of Medicine; James R. Zaidan, Uniontown, Pa., Allegheny General Hospital Department of Surgery, Pittsburgh, Pa.; and George Zaldivar, Steubenville, Ohio, Montefiore Hospital Department of Medicine, Pittsburgh, Pa.

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The Month in Washington

• **From the Washington Office of the American Medical Association.**

THE speaker of the American Medical Association's House of Delegates has warned against exaggerated claims that national health insurance is the total answer to the nation's health care problems.

Testifying before the Senate Finance Committee, Russell B. Roth, M. D., Erie, Pennsylvania, said the medical profession as represented by the AMA is "concerned by the over-promise which seems inherent in a wide variety of legislative proposals placing strong reliance on a restructuring" of the health care delivery system in this country.

"We caution against the attractive but totally impractical notion that one legislative act can solve the problems (as to health care) of a profoundly troubled society," he said.

"We commend to you our specific proposal (Medicredit) for attacking financial barriers. We also solicit your support in ongoing efforts to augment manpower, to improve practice patterns, to apply effective measures to moderate and contain costs, to meet the challenges of the inner-city and the rural scene, and in general to meet the goal that no one shall be deprived of the best health care that is within our power to provide."

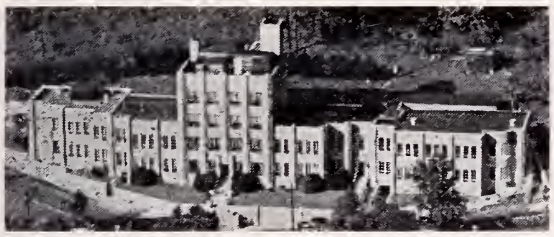
"Those of us who are in group practice, and there are over 40,000 of us, have our own concepts of its advantages to our patients and to us," Doctor Roth said. "But few of us look upon group practice as a panacea. The notion has been advanced that the AMA opposes salaries for physicians and champions direct fee-for-service alone. This would come as news to our large number of member physicians who derive their income in whole or in part from salary. It is a false premise. Upon it is based the allegation that fee-for-service favors over-treatment and pre-payment does not. One might as logically assert that pre-payment favors under-treatment. Actually a good and conscientious physician responds with consistency to the needs of his patients as he sees them.

"One hears over and over the statistical studies to show reduced utilization rates under pre-payment. But less prominence is given to other studies such as that by the Russell Sage Foundation which concluded that nearly half of all members of the Health Insurance Plan of Greater New York and also of the Labor-Health Institute go outside of the plan for some medical service. It is not our aim to downgrade prepaid practice. Many physicians, as well as many patients, like it. Under the Kaiser plan, only some 15 per cent of beneficiaries who have opted into pre-payment coverage, opt out of it later on. But mark you, they do have an option.

"It is implicit, in our defense of a pluralistic flexible system, that pre-paid group practice and such modifications of it as may be devised under the title of health maintenance organizations should have their opportunity to demonstrate their capacities to provide effective, efficient and economical care. Any freeze into a single mold would deprive our nation of the benefits of competition and comparison. Here, legislative mandate can do more harm than good.

"In a somewhat similar vein of caution we would note that there is danger in expecting too much of professional services review or peer review. To attempt to legislate it into effective being may be a frustrating experience. The frustration stems from the fact that when the question concerns the appropriateness of technical, medical care and the equity of charges for it, only another physician can pass the judgment. This is a fact which is forcing upon physicians the obligation to evaluate the practices of their colleagues. Large segments of the medical profession take substantial pride in their accomplishments in this respect.

"In applying the principles of peer review the reviewing group seeks to uphold quality, to promote efficiency, and to eliminate departures from accepted practices and equitable charges. By and large, practicing physicians accept the necessity for checks and balances in the paying out of public funds and private funds as well. On the other hand, they have no appetite for the job to be done by non-medical persons or agencies ill-equipped to judge. This is why they are willing to redouble their efforts within their professional organizations to do the job well. We know of no successful efforts to legislate ethics or morals, which must be at the heart of any system of competent, conscientious delivery of medical care. On the other hand, we know of no profession which has shown a better motivation or performance through its collective professional organizations to rule out abuses and lack of competence. It is of paramount importance to support the progress which has been made, not to cast it aside."



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Obituaries

GARNET BRADLEY, M. D.

Dr. Garnet Bradley, 58, died April 10 at her home in Hundred, Wetzel County. She was a native of Hundred, the widow of Dr. Ralph Talbott and a former Professor of Psychiatry at West Virginia University.

Doctor Bradley was a graduate of West Virginia University and Chicago Medical School; served her internship at Women's and Children's Hospital in Chicago, and her residency in psychiatry at Elgin State Hospital in Illinois.

She also served as staff physician at the Institute of Juvenile Research in Chicago; as pyschoanalysis medical staff officer at the Cook County Hospital Mental Health Clinic, also in Chicago, and as a staff phychiatrist at a Veterans Administration Hospital.

She had held membership in the Wetzel County Medical Society, the West Virginia State Medical Association and the American Medical Association, and was Board-certified in psychiatry.

Survivors include a son, John B. Talbott, of Chicago; two sisters, Mrs. G. Z. Shinn of China Grove, North Carolina, and Mrs. Walter Swenson of Northfield, Illinois; and two brothers, Harry Bradley of Hundred and Dr. Robert Bradley of Lexington, North Carolina.

* * * *

DEAN F. HILL, M. D.

Dr. Dean F. Hill, 61, of Beaver in Raleigh County, died in a Beckley Hospital April 6 after a long illness. A native of Lincoln, Nebraska, Doctor Hill received his medical degree from Northwestern University in Evanston, Illinois, and practiced medicine and surgery in Sussex, New Jersey, before coming to the Beckley area in 1961.

Survivors include his widow; two sons, Dean F. Hill, Jr., of Golden, Colorado, and Robert M. Hill, Beaver; two daughters, Mrs. Jan Cole of Beaver and Miss Judith Ann Hill, at home; two stepsons; two brothers, and one sister.

* * * *

EDGAR F. HEISKELL, JR., M. D.

Dr. Edgar F. Heiskell, Jr., Morgantown surgeon, died of a heart attack in West Virginia University Hospital April 14. He was 53.

A native of Morgantown, Doctor Heiskell received an A. B. degree from West Virginia University in 1938; a B. S. degree, also from WVU, in 1940, and his M. D. degree from Northwestern University in Evanston, Illinois, in 1942.

After interning at Polyclinic Hospital in New York City in 1942-43, he served for two years in the U. S. Army Medical Corps. He then entered practice in orthopedics in Morgantown in 1946.

From 1949 until 1951, Doctor Heiskell was in residency training at Wichita Falls General Hospital in Wichita Falls, Texas. He returned to practice in Morgantown in 1951.

Doctor Heiskell was Chief of Staff at Monongalia General Hospital in Morgantown, and an Associate Professor of Surgery at the WVU School of Medicine. He was a member of the Monongalia County Medical Society; the American Medical Association, and the West Virginia State Medical Association. He was Chairman of the State Association's WVU Liaison Committee.

Doctor Heiskell was certified by the American Board of Surgery, and also was a Past President of the West Virginia Chapter, American College of Surgeons.

Survivors include the widow, Mrs. Barbara Baker Heiskell; four sons, Edgar F. Heiskell, III, of Morgantown; Dr. Charles Andrew Heiskell of Chicago, Illinois; John Christopher Heiskell of Houston, Texas, and Jeffrey Neil Heiskell, at home; two daughters, Holly Ann Heiskell and Heather Ellen Heiskell, both at home; a brother, Neil J. Heiskell of New York City, and a sister, Mrs. Winifred Wildman of Morgantown.

* * * *

O. LAKE HUFFMAN, M. D.

Dr. and Mrs. O. Lake Huffman of Romney were killed May 11 in an automobile accident near their home. Doctor Huffman was 59.

A native of Buchanan, Virginia, Doctor Huffman was a graduate of Roanoke, Virginia, College and received his medical degree in 1938 from the University of Virginia Medical School in Charlottesville.

He interned at Roanoke City Memorial Hospital in 1938-39, and was in the general practice of medicine in Marshall, Virginia, as well as in several West Virginia communities.

He was a member of the Potomac Valley Medical Society, the West Virginia State Medical Association and the American Medical Association. He also was a former member of the Tygart's Valley Medical Society.

* * * *

JOHN R. GODBEY, M. D.

Dr. John Randolph Godbey of Charleston, a staff member at the Raleigh-Boone Medical Center in Whitesville, died May 1 in Princeton General Hospital after a brief illness. He was 60.

Doctor Godbey, a graduate of Kentucky Military Institute, received his medical degree from the University of Maryland in 1935 and did post graduate work in anesthesia at Reading, Pennsylvania, Hospital in 1946.

He was a member of the Kanawha Medcial Society, the West Virginia State Medical Association and the American Medical Association; and was a Fellow of the American College of Anesthesiology.

Doctor Godbey was a veteran of World War II

(Continued on Page xviii)

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County Societies

HARRISON

The Harrison County Medical Society adopted at its April meeting a resolution calling upon the City of Clarksburg to reconsider possible reductions in its allocations to the Harrison-Clarksburg Health Department.

The resolution also said that Clarksburg's City Council, the Harrison County Court and the West Virginia State Health Department "should take immediate steps to effect a more workable solution for the future financing of the Harrison-Clarksburg Health Department."—L. Dale Simmons, M. D., Secretary.

* * * *

KANAWHA

Dr. Richard S. Shulman of the Molecular Disease Branch, National Institute of Health, Bethesda, Maryland, was the speaker for the May 11 meeting of the Kanawha Medical Society at the Daniel Boone Hotel in Charleston.

Doctor Shulman gave an interesting talk on "Hyperlipoprotienemias and their Clinical Significance." He also visited Charleston Memorial Hospital, and Herbert J. Thomas Memorial Hospital in South Charleston, on May 11 and 12.

* * * *

MERCER

Dr. George R. Callender, Jr., of Charleston, President of the West Virginia State Medical Association, gave an interesting review of problems and developments in medicine in the State at the April 19 meeting of the Mercer County Medical Society in Princeton.

Wives of the Society members were among guests for the meeting. The Society also voted to make a contribution to Camp Kno-Koma, a program operated each summer near Charleston for diabetic children.—John J. Mahood, M. D., Secretary.

* * * *

MONONGALIA

William Fleming, Ph. D., Chairman of West Virginia University's Department of Pharmacology, gave an interesting talk on "Current Knowledge of Adrenergic Nerve Function" at the regular meeting of the Monongalia County Medical Society April 6 in Morgantown.

Thirty-eight members and four guests were present. Action by the Society's Council which directed the Treasurer to send a $200 donation to Camp Kno-Koma, the annual program conducted near Charleston for diabetic children, was noted.—William G. Klingberg, M. D., Secretary.

OBITUARIES—(Continued)

and Korean War service with the U. S. Navy's Medical Corps, and was awarded the Silver Star while serving with the U. S. Marines at Guadalcanal.

Survivors include his widow; a daughter, Miss Lynn Godbey, at home, and a sister, Miss Betty Godbey, of Charleston.

* * * *

T. H. MILLMAN, M. D.

Dr. T. H. Millman, retired physician, died April 20 at his home in Rupert, Greenbrier County. He was 64.

A native of Chicago, Illinois, Doctor Millman received his medical degree from the University of Wisconsin, and interned at the Medical College of Virginia Memorial Hospital in Richmond.

From 1947 to 1950, he was a physician for the Anjean Coal Company in Greenbrier County. He returned to Rupert in 1965 after 15 years of practice in Leaksville, North Carolina. Illness forced his retirement in 1970.

Doctor Millman was a former member of the Wyoming County, Logan County, Central West Virginia and Greenbrier Valley Medical Societies; the West Virginia State Medical Association; the North Carolina State Medical Association, and the American Medical Association.

He is survived by his widow; a daughter, Miss Eleanor D. Millman of Fairmont; a son, T. H. Millman, II, of Athens, Georgia; a sister, Mrs. Helen Burris of Platteville, Wisconsin, and two brothers, Dean A. Millman of Sun City, Arizona, and Gordon Millman of Platteville, Wisconsin.

* * * *

DONLEY SCHULTZ

Donley Schultz, 63, Executive Secretary of the West Virginia Chapter, American Academy of General Practice, for 14 years, died of a heart attack in his home city of Fairmont on April 13.

Mr. Schultz also had been Purchasing Agent for Fairmont General Hospital for 10 years; and was a former Administrator of Fairmont Emergency Hospital.

Survivors include his widow; two sons, Forest W. and Donley K. Schultz, Jr., of Fairmont, and his mother, Mrs. Cora Belle Schultz, of Morgantown.

Continuing Education Awards

More than 20,000 doctors have received the Physician's Recognition Award established by the American Medical Association in 1969 to honor participation in continuing medical education. The award is given for a minimum of 150 credit hours earned over a continuous three-year qualifying period. At least 60 hours are required credits of formal education courses, teaching or publications.

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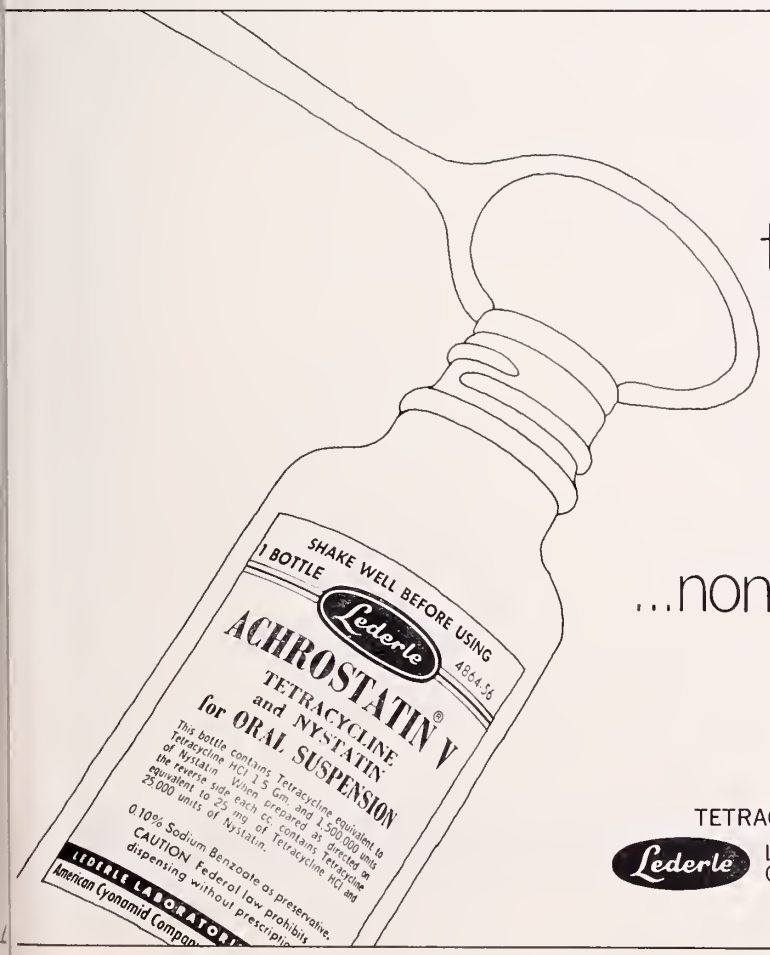

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Woman's Auxiliary

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Southern Regional Director: Mrs. J. L. Mangus, Charleston
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Recording Secretary: Mrs. Harvey Martin, White Sulphur Springs
Corresponding Secretary: Mrs. A. M. MacKay, Forest Hills, Ky.
Parliamentarian: Mrs. William T. Lawson, Fairmont

The Woman's Auxiliary to the West Virginia State Medical Association held its annual spring executive board meeting April 21-22 at the Up Towner Inn in Clarksburg, with Mrs. Robert J. Tchou of Williamson, the Auxiliary's President, in charge.

The program included a Thursday morning, April 22, workshop with Mrs. M. Bruce Martin of Huntington, the Auxiliary's President Elect, presiding. A discussion centered about the topic, "One Year Diary—Planning Your Year."

HARRISON

The Woman's Auxiliary to the Harrison County Medical Society elected Mrs. Robert D. Hess of Bridgeport as its new President during its April meeting at the Stonewall Jackson Hotel in Clarksburg. Mrs. William N. Walker, Jr., was named Vice President; Mrs. John D. H. Wilson, Secretary, and Mrs. E. Burl Randolph, Treasurer.

Mrs. Hess, who has served as the Auxiliary's historian, presented an interesting resume of the group's past programs and activities.—Mrs. John D. H. Wilson, Secretary.

* * * *

MERCER

The book cart project operated by the Woman's Auxiliary to the Mercer County Medical Society, and designed to provide reading materials to patients at Bluefield Sanitarium, has attracted new attention in that community.

The project is five years old, and 10 Auxiliary members are serving as regular book cart workers this year with Mrs. Karl Weier as the chairman. The workers are at the hospital on Wednesday and Thursday of each week.—Mrs. J. E. Blaydes, Jr., Publicity Chairman.

* * * *

KANAWHA

The Woman's Auxiliary to the Kanawha Medical Society has elected Mrs. J. L. Berkley as President.

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Associate in Neurology

CHILD PSYCHIATRY

GILBERT SILVERMAN, M. D.
Associate in Child Psychiatry

ADMINISTRATION

H. R. WOODALL
Administrator

Other new officers chosen at the Society's April 20 meeting at the home of Dr. and Mrs. A. Thomas McCoy in Charleston include:

Mrs. Clarence Stennett, President Elect; Mrs. John J. Schaefer, First Vice President; Mrs. James Hughes, Second Vice President; Mrs. Thomas Janicki, Third Vice President; Mrs. Rodolfo Stock, Fourth Vice President; Mrs. Robert O'Connor, Corresponding Secretary; Mrs. Larry D. Curnutte, Treasurer, and Mrs. O. M. Harper, Recording Secretary. —Mrs. Robert O'Connor, Corresponding Secretary.

* * * *

MARION

New officers installed by the Woman's Auxiliary to the Marion County Medical Society at its April 27 meeting at the Woman's Club in Fairmont include:

Mrs. R. H. Jones, Jr., President; Mrs. Joseph T. Mallamo, President Elect; Mrs. Donald M. Koppel, Vice President; Mrs. Joseph D. Romino, Recording Secretary; Mrs. C. S. Lawson, Jr., Corresponding Secretary, and Mrs. Frederick G. Shaffer, Treasurer.—Mrs. C. S. Lawson, Jr., Corresponding Secretary.

* * * *

RALEIGH

The Woman's Auxiliary to the Raleigh County Medical Society voted a $485 contribution to the

(Continued on Page xxii)

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Stephen D. Ward, M. D.
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Roentgenology:
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J. N. Aceta, M. D.

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James P. Frum, M. S.

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Technologists:
Electracardiography:
Betty Maguire, R. N.
Electraencephalagraphy:
Jaann Green, R. N.
Juanita Stone, R. N.
Raentgenalagy:
Evelyn Farester, R. T.

Administration:
Lester L. Cline, Manager
Henry L. Castilaw, Asst. Mgr.

WOMAN'S AUXILIARY—(Continued)

American Medical Association's Education and Research Foundation at its April meeting in Beckley.

The Auxiliary elected Mrs. C. Richard Daniel as its President for its new year, and also chose these other officers: Mrs. Roy James Yates, Vice President; Mrs. James A. Barnes, Recording Secretary; Mrs. Roberto Concepcion, Corresponding Secretary; Mrs. John M. Daniel, Treasurer, and Mrs. Ross P. Daniel, Parliamentarian.—Mrs. Roberto Concepcion, Recording Secretary.

VD Task Forces Proposed

Dr. Bruce P. Webster of New York City, Chairman of the new National Commission on Venereal Disease, has proposed establishment of VD task forces at state levels.

He suggested that representatives of state and county medical societies should be members; and that physicians can be kept up to date on current methods of diagnosing and treating VD through medical society-sponsored seminars.

Commission members include Dr. C. A. (Carl) Hoffman of Huntington, Secretary-Treasurer of the American Medical Association and an AMA Trustee.

Book Reviews

HANDBOOK OF PEDIATRICS—Lange Medical Publications, Drawer L. Los Altos, California 94022.

This ninth edition—713 pages, pocket size—is a handy reference to any of the pediatric problems liable to confront the family physician.

There are 32 chapters including such items as emotional problems, collagen diseases, developmental screening, and an excellent review of fluid and electrolyte disorders and replacement of deficits.

The chapter on procedures is precise and well illustrated.

The appendix of 75 pages contains tables on drug therapy, laboratory tests, normal values, differential sings, etc.

The book is well written and relatively easy to read, but the print is small and faint, and the columns are wide. A lot of information is packed into a small space. The index is minute and unusually helpful.

The book is recommended for ready reference.

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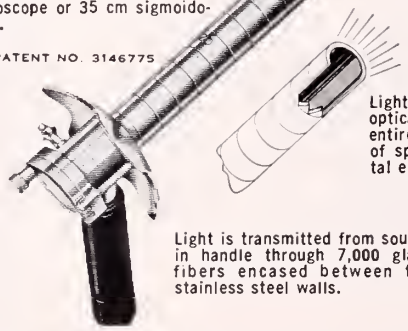

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New Materials on Hypertension Issued by Heart Agency

"Mechanisms of Hypertension, 1970," the proceedings of two-day scientific sessions held by the American Heart Association's Council for High Blood Pressure Research, are now available in book form.

Issued as Volume 18 in the Hypertension Series, the book deals with medical problems related to hypertension and is expected to be of special interest to physicians and researchers in the hypertension field, as well as internists, cardiologists, medical libraries and medical schools.

Earlier volumes in the series dating from 1961 onward also are available from the AHA National Office at reduced prices.

Likewise in this area, a table-top "Diagnostic Testing Unit on Hypertensive Disease" has been prepared by the Heart Association for use at medical meetings; as a teaching exercise for medical students and house officers, and as a basis for discussion at hospital staff meetings.

The unit's four panels illustrate pertinent laboratory data on four patients. After reading their case histories and studying the panel's x-rays, eyegrounds and electrocardiograms, the physician fills out a multiple choice questionnaire concerning each case. An accompanying 14-page booklet contains instructions for testing, case histories and questions and answers.

The 10-pound unit may be obtained on a loan or purchase basis from local Heart Associations or the AHA Central Office, 44 East 23rd Street, New York, New York 10010.

Council On Arteriosclerosis Meets in November

The Council on Arteriosclerosis of the American Heart Association will hold its annual scientific meeting on Tuesday and Wednesday, November 9-10, in Anaheim, California, immediately preceding the Association's Scientific Sessions programs.

June 4, 1971, has been set as the deadline for submitting abstracts to be presented at the Council sessions, which are open to all individuals.

Members and non-members are invited to submit abstracts for consideration, using official forms available from the Association's Department of Councils and International Program, 44 East 23rd Street, New York, New York 10010.

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WANTED—General practitioner to locate in Sistersville, Tyler County. A 19-bed general hospital is available; drawing area is approximately 20,000. Successful practice assured and assistance will be offered in locating office space. Call John L. Moore, Administrator, Sistersville General Hospital, collect, for particulars (304) 657-2401.

WANTED—Two general practitioners in Marlinton, Pocahontas County. A 42-bed general hospital is available. Successful practice practically assured and assistance will be offered in locating office space. Call Mr. S. E. Drumm, Administrator, Pocahontas Memorial Hospital in Marlinton, collect, for particulars (304) 799-4193.

EMERGENCY ROOM PHYSICIAN—Accredited 280-bed progressive general hospital in beautiful Huntington, West Virginia; excellent income and working conditions; contact Assistant Administrator, Cabell Huntington Hospital, 1340 Sixteenth Street, Huntington, West Virginia 25701 or Call (304) 696-6590 "collect."

AVAILABLE—Excellent opportunity for single or group medical practice in furnished or unfurnished space in well located Professional Building in Huntington. Address all inquiries to Management, Suite 204, 1139 Fourth Avenue, Huntington, W. Va. 25701.

AVAILABLE—July 1, 1971, Board eligible neurosurgeon interested in solo or partnership practice. Contact CYA, The W. Va. Medical Journal, Box 1031, Charleston, W. Va. 25324. Phone (412) 687-1546.

WANTED—General practitioners, internists, some specialists in New Martinsville, W. Va. County seat with 7,000 population. Drawing area encompasses four counties, approximately 30,000. Six stable, medium to large industries. Progressive community, growing, a good place to live and raise a family. Existing hospital with 80 beds and expect to start construction on new acute care hospital in 1971. Local funds raised. Well worth investigation. Contact Dr. C. P. Watson, Secretary, Wetzel County Medical Society, 182 Maple Avenue, New Martinsville, W. Va. 26155.

WANTED—Two general practitioners and a pediatrician to locate in a rapidly growing and extremely progressive community; excellent recreational facilities; within driving distance of the larger metropolitan areas; modern 45-bed general hospital, fully equipped and staffed; qualified general surgeon in residence. Write HRL, The West Virginia Medical Journal, P. O. Box 1031, Charleston, W. Va. 25324.

WANTED—Pediatricians and family physicians, OEO Rural Health Program. Practice limited to hospital and clinics. Salary, $22,000 to $24,000. Fringe benefits. Write Medical Director, Mountaineer Family Health Plan, Inc., Box 1149, Beckley, W. Va. 25801.

WANTED—An internist and one or two general practitioners in Grafton. New hospital under construction, new school funded, new and extensive recreational facilities and new industries. Opportunity unlimited for industrious and qualified physicians. Located 26 miles from WVU Medical Center. Contact Dr. Wallace B. Murphy, Chief of Staff, Grafton City Hospital, Grafton, W. Va. 26354.

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WANTED—Board certified internists or those in the process of obtaining certification. If you qualify, please write Lonnie L. Crane, The Myers Clinic, Philippi, W. Va. 26416.

WANTED—GP for Northern West Virginia town of 3,000. Good schools, recreational facilities and shopping. Fifteen-minute drive from hospital. Excellent practice opportunity. Contact Mr. Claud C. Kendall, 12 Jefferson Street, Mannington, W. Va. Telephone: 986-1242.

AVAILABLE—Physician seeking full or part-time employment in clinic, hospital or as associate in practice. Licensed in West Virginia. Contact EWF, The West Virginia Medical Journal, Box 1031, Charleston, West Virginia.

PHYSICIANS WANTED—Due to death and retirement, general practitioners and all varieties of specialists are needed in Clarksburg area. Financial help provided. Contact Dr. Herman Fischer, Recruitment Committee Chairman, 224 W. Olive Street, Bridgeport, W. Va. 26330.

WANTED—A general practitioner to locate in the growing town of Fort Ashby (Mineral County) West Virginia, situated to serve the communities of Short Gap, Springfield and Green Spring. Excellent opportunity for an ambitious physician. For information on possible assistance in establishing office facilities, contact Doctor Committee, Fort Ashby Lions Club, Fort Ashby, W. Va. 26719.

WANTED—Internist urgently needed in a growing northeastern West Virginia community; drawing area is approximately 23,000; modern hospital with excellent facilities; office space available; guaranteed annual income; centrally located for vast recreational facilities. Write RLH, The West Virginia Medical Journal, P. O. Box 1031, Charleston, W. Va. 25324.

In summary, Dalmane is useful in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening. It can be used effectively in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep.

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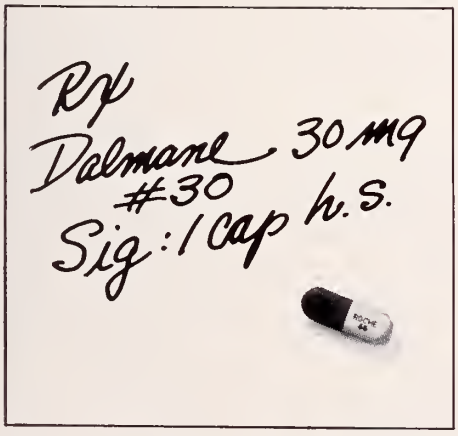
In most instances in which adverse effects with Dalmane were reported, they were mild, infrequent and seldom required discontinuation of the drug. Dizziness, drowsiness, lightheadedness and the like were the side effects most frequently noted, particularly in elderly or debilitated patients.[3] Instances of hepatic dysfunction, paradoxical reactions (excitement) and hypotension are rare with Dalmane, and morning hang-over is relatively infrequent. In studies to date the effectiveness of Dalmane for recommended periods of use is maintained without need to increase dosage.

References: 1. Kales, A., *et al.*: "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. **2.** Kales, A., *et al.*: "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed): *Sleep: Physiology and Pathology*, Phila., Lippincott, 1969, p. 331. **3.** Data on file, Medical Department, Hoffmann-La Roche Inc.



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Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

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JULY
1971

Vol. 67 No. 7

The
WEST VIRGINIA
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Member 1971

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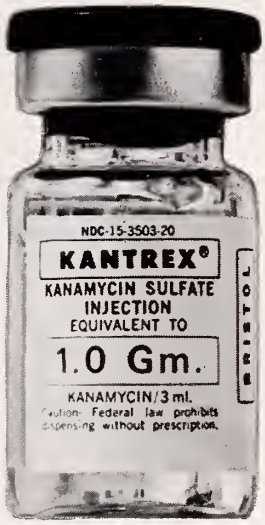
On formulary and in the pharmacy...



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recautions: Obtain audiograms before and during therapy in patients with renal dysfunction when treatment lasts more than 5 days. Stop Kantrex if tinnitus or hearing loss occurs. Hydrate patients to prevent chemical irritation of the renal tubules. Assess renal function periodically, both before and during therapy. If signs of renal irritation occur (casts, cells, proteinuria) increase hydration and reduce the dosage or the frequency of dosage if necessary — in azotemic patients the frequency (in hours) of doses may be obtained by multiplying the serum creatinine by 9. If azotemia or oliguria occur, discontinue therapy. Mycotic or bacterial superinfection may occur.

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WVU Medical Center
—News—

• **Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.**

THOMAS H. Covey, Jr., M. D., Physician Consultant for the West Virginia Regional Medical Program, has initiated the "Physician-in-Residence Program" as a WVRMP central service in conjunction with the West Virginia University Medical Center.

The first visit of a specialist from the Medical Center was made to a community in the Eastern part of the State, and early reports indicate the program was well received.

This program was designed so that members of the University School of Medicine faculty would visit communities in each of the nine areas of the State for a period of time for intensive consultation with the community medical personnel.

The first contact with the local medical leaders is made by the WVRMP Area Liaison Officer to ascertain what physician specialty would be most helpful to have in residence. Then, Doctor Covey works out the details of dates, subject matter, and protocol with the participating physicians.

After that, the member of the faculty who is selected as the most appropriate physician to answer specific needs of a community is put in touch with the key physician in the community and final plans are made.

Doctor Covey said the program was designed to increase communications between the faculty members and practicing physicians throughout the State.

"They will share educational experiences and both will benefit from the informal teaching experience," Doctor Covey said.

He added that there is enough flexibility in the plan for the visiting faculty member and the community physicians to preplan certain lecturers and discussions and still have time for individual consultation and informal discussions.

Current plans call for five or six additional faculty members to participate in the plan during the next few months.

Faculty Activities

Dr. Philip M. Sprinkle, Otolaryngology, and Dr. Bernard Zimmermann, Surgery, were program participants at the American College of Surgeons' recent joint Sectional Meeting for Surgeons and Graduate Nurses in New Orleans. Doctor Sprinkle presented a paper entitled "Recurrent Salivary Gland Disease." Aldosteronism was Doctor Zimmermann's topic for a panel discussion of "Hyperfunctioning Endoctrine Tumors."

Dr. N. LeRoy Lapp, Medicine, was visiting professor at Baroness Erlanger Hospital in Chattanooga, Tennessee, recently, giving two lectures: "Diagnosis and Treatment of Respiratory Failure" and "The Diagnosis and Treatment of Diseases Associated with an Alveolar-Capillary Block." He also made rounds with the house staff at which time cases were presented.

A film crew from New York City visited the Medical Center in March to make a motion picture on how to quit smoking cigarettes. Dr. Jerome L. Schwartz, Public Health and Preventive Medicine, served as technical adviser and played a principal role in the film. A behavioral scientist, he was director of a four-year study on cigarette smoking in Berkeley, California. The 25-minute motion picture is one of eight in a series being made to help industrial and business executives understand current health problems.

Dr. Robert L. Nolan, Public Health and Preventive Medicine, was in Washington in March to testify before the U. S. Senate's Subcommittee on Health concerning rural health problems and proposals for their solution.

Dr. Edmund B. Flink, Professor and Chairman of the Department of Medicine at West Virginia University School of Medicine, displays an engraved silver tray he received after being named outstanding clinician by the Class of 1971. Class President Russell V. McDowell (left) of Morgantown made the presentation during a convocation at the WVU Medical Center. The seniors chose McDowell for the Upjohn Award—represented by a check for $150 and an engraved plaque—for his applied personal qualities, character and leadership. Dean Frank W. McKee (right) of the School of Medicine offers congratulations to both recipients.

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The Month in Washington

• **From the Washington Office of the American Medical Association.**

THE House Ways and Means Committee has approved the Social Security Amendments of 1971 (Medicare and Medicaid changes) and sent the massive health bill to the floor of the House for expected early passage.

As adopted by the Committee, the bill concerns itself with the implementation of the Administration's Health Maintenance Organization option for Medicare beneficiaries; restricts physicians' fee increases under federal programs; reduces some long-term Medicare benefits, and covers under Medicare for the first time disabled Social Security beneficiaries.

The Secretary of HEW would also be authorized to conduct experiments with area-wide or community-wide peer review, utilization review, and medical review mechanisms.

Congress failed to pass substantially the same bill during the last session due to major differences between House and Senate versions, and a lack of time to reach agreement.

Medicare beneficiaries would be permitted to have all covered care provided by a Health Maintenance Organization (HMO), defined as a prepaid group health or other capitation plan, with the government reimbursing the HMO's at 95 per cent of the average cost of Medicare beneficiaries in the area.

Physicians' Medicare fees would be pegged at the 75th percentile of actual charges in a locality, and future increases would be tied to a special index reflecting rising costs. The Department of Health, Education and Welfare could terminate payments to providers found guilty of program abuses.

A Medicare co-insurance factor one-eighth of the hospital deductible would be applied after the 30th day. The Medicare Part B deductible would rise to $60 a year and medically indigent persons above the poverty level could be required by the states to pay an income-related premium.

Other features of the proposed legislation:

• HEW would be required to develop experiments and demonstration projects designed to test payment to providers of services on a prospective basis under the Medicare; Medicaid, and Maternal and Child Health programs.

• Limits on institutional provider costs to be recognized as reasonable under Medicare could be imposed based on comparisons of the costs of covered services by various classes of providers in the same geographical area.

• Medicare would pay for the services of teaching physicians on the basis of reasonable costs, rather than fee-for-service charges, unless a bona fide private patient relationship had been established or the hospital had, in the 2-year period ending in 1967, and subsequently, customarily charged all patients and collected from at least 50 percent of patients on a fee-for-service basis. Medicare payments could also be authorized on a cost basis for services provided to hospitals by the staff of certain medical schools.

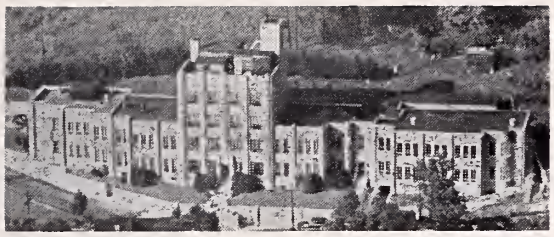
• HEW would be authorized to established minimum periods of time (by medical condition) after hospitalization during which a patient would be presumed, for payment purposes, to require extended care level of services in an extended care facility. The attending physician would certify to the condition and related need for the services. A similar provision would apply to post-hospital home health services.

• Present penalty provisions relating to the making by providers of care of a false statement or representation of a material fact in any application for Medicare payments would be broadened to include the soliciting, offering, or acceptance of kickbacks or bribes, including the rebating of a portion of a fee or a charge for a patient referral. The penalty for such acts, as well as the acts currently subject to penalty under Medicare, would be imprisonment up to one year, a fine of $10,000, or both. Similar penalty provisions would apply under Medicaid.

• HEW would conduct a two-year study of the desirability of covering chiropractors' services under Medicare.

The bill allows the HEW Secretary to authorize experiments with methods of Medicare reimbursement or payment, "with area-wide or community-wide peer review, utilization review, and medical review mechanisms," and with performance incentives for intermediaries and carriers.

Another section of the catch-all bill of wide public interest would establish a new family assistance welfare plan. The bill also increases Social Security case benefits and taxes.



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Obituaries

ISIDORE I. HIRSCHMAN, M. D.

Dr. Isidore I. Hirschman, 82, who practiced internal medicine in Huntington from 1923 until his retirement in 1961, died May 6 in a Huntington hospital.

Doctor Hirschman, a native of Baltimore, Maryland, received his medical degree from the University of Maryland. He was a physiology instructor at Johns Hopkins University in Baltimore from 1914 until 1918, and was a tuberculosis consultant for the U. S. Army's Seventh Division in World War I.

After that conflict, and before moving to Huntington to enter private practice, Doctor Hirschman served with the old Veterans Bureau as a district medical officer in Maryland, Virginia, West Virginia and the District of Columbia.

He was an honorary member and former President and Secretary of the Cabell County Medical Society; and an honorary member of the West Virginia State Medical Association and the American Medical Association. After retirement from private practice, he continued in medicine as a consultant to the Veterans Administration Hospital in Huntington.

Survivors include his widow and a son, Isidore Hirschman, Jr., of St. Louis, Missouri.

* * * *

JAMES E. SPARGO, M. D.

Dr. James E. Spargo of Wheeling, who had practiced in Warwood since 1945, died May 24 at Wheeling Hospital. He was 58, and Immediate Past President of the West Virginia Chapter, American Academy of General Practice.

A native of Wheeling, Doctor Spargo received his undergraduate degree from West Virginia University and his medical degree from the Medical College of Virginia in 1940.

He was a member of the Ohio County Medical Society; the West Virginia State Medical Association, and the American Medical Association. He was a Fellow of both the American Society of Adominal Surgeons and the American Geriatrics Society, Inc.

Doctor Spargo is survived by his widow; one son, James Errol Spargo, and his mother, Mrs. Jennie May Evans Spargo, of Wheeling.

* * * *

Miami Course for the Family Physician

A post graduate course in "Otolaryngology for the Family Physician" will be held October 8-9 at the Sheraton Four Ambassador Hotel in Miami, Florida, under sponsorship of the University of Miami School of Medicine's Department of Otolaryngology. The course will carry nine hours of American Academy of General Practice credit.

Cancer Vaccine Development Still Lies in Future

Reports on cancer research presented at the recent American Society for Microbiology meeting were optimistic, but cautious, about the chances for development of a human cancer vaccine, according to a representative for the National Society for Medical Research.

Researchers from the University of Tennessee at Knoxville reported that they have successfully immunized mice and hamsters against several forms of cancer.

Dr. Joseph H. Coggin and his colleagues injected their animals with irradiated human, mice and hamster fetal cells. They found that the embryonic antigens made 60 to 70 per cent of the hamsters immune to a form of cancer produced by adenovirus, a human respiratory virus. Up to 70 per cent of the animals were immune to a cancer caused by simian virus 40, a virus found in monkeys.

Those animals exposed to these two viruses without vaccination repeatedly developed fatal cancers.

This technique has been tried before without success, but Doctor Coggin's research associate, Miss Kathleen Ambrose, discovered that irradiation stops the fetal cells from maturing after injection into adult tissue. The antigen can then remain in its original state, giving the host animal an opportunity to develop antibodies.

In another report, researchers from the Upjohn Company in Kalamazoo, Michigan, and Johns Hopkins Medical School in Baltimore told conference participants that an antibiotic originally developed for tuberculosis treatment may be able to block the growth and spread of cancerous cells.

The scientists said the antibiotic—of the streptovaricin group—inhibits approximately 80 per cent of the activity of an enzyme which transfers genetic information from the ribonucleic acid (RNA) of a virus cell to the deoxyribonucleic acid (DNA) of a normal cell.

According to the team, "This causes the normal cell to take on the characteristic of cancer and duplicate itself many times in that malignant form." This particular enzyme was isolated by Dr. Howard M. Temin of the University of Wisconsin.

Success has been confined to the test tube to date, but tissue culture and animal trials are now being conducted under the direction of Dr. William A. Carter of Johns Hopkins.

Although the researchers do not know if streptovaricin inhibition of the enzyme will kill established cancer cells, they have said the drug may prevent development of new cancer cells. If their expectations prove true, present treatments for leukemia could be used against cancerous cells while streptovaricin maintains any achieved remission.

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County Societies

CABELL

Joseph McMullen, Athletic Director at the University, gave an interesting talk on "The Future of Athletics at Marshall" at the May 13 regular meeting of the Cabell County Medical Society at the Frederick Hotel in Huntington. McMullen was accompanied to the meeting by Marshall Basketball Coach Stewart Way.

The Society elected Dr. Marshall Thomas to honorary membership, and Dr. Samuel L. Henson of Hurricane was made an associate member. Dr. Jack O. Sheppe, the Society's President, read a letter from the Administrator of Doctors' Memorial Hospital (formerly the Chesapeake and Ohio Hospital) announcing reorganization of the administrative structure there, and inviting community physicians to join the staff.—G. E. Vanston, M. D., Secretary.

* * * *

HANCOCK

Dr. George R. Callender, Jr., of Charleston, President of the West Virginia State Medical Association, gave an interesting talk on "The Future of Medical Practice" at the May 18 meeting of the Hancock County Medical Society at Williams Country Club in Weirton.

Dr. David Z. Morgan, Assistant Dean of the West Virginia University School of Medicine, gave an informative presentation on enrollment and other features of the School. Other guests at the meeting included Mrs. Callender and wives of society members.—M. J. Packovich, M. D., Secretary.

* * * *

HARRISON

The Harrison County Medical Society elected Dr. Herman Fischer as its President during its monthly meeting May 6 at the Stonewall Jackson Hotel in Clarksburg. He succeeds Dr. Hugh M. Brown.

Other new officers include Dr. L. Dale Simmons, Vice President; Dr. Robert D. Hess, Secretary, and Dr. M. V. Kalaycioglu, Treasurer. Drs. E. Burl Randolph and Ray A. Harron were elected to the Society's Board of Directors. Twenty-two members and guests attended the meeting.—Robert D. Hess, M. D., Secretary.

* * * *

KANAWHA

Dr. George R. Callender, Jr., of Charleston, President of the West Virginia State Medical Association, presented an interesting, illustrated explanation of "Medicredit" at the June 8 monthly meeting of the Kanawha Medical Society at Charleston's Daniel Boone Hotel.

(Continued on Page xx)

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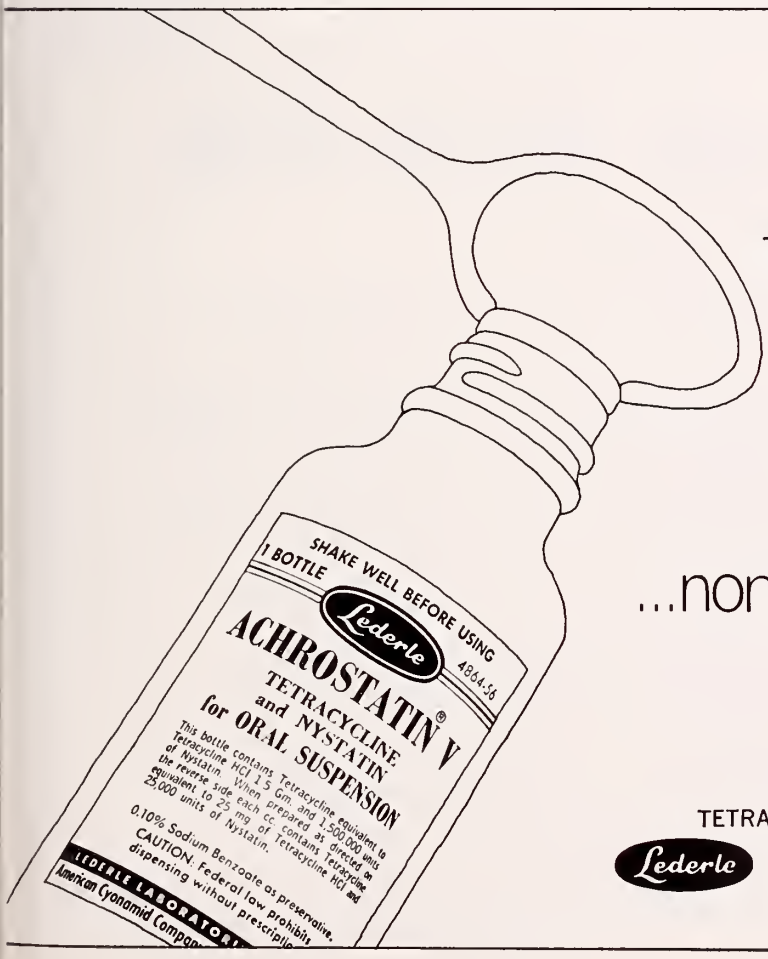

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"Medicredit" is the national health insurance program introduced into the Congress by the American Medical Association, and Doctor Callender was assisted in his presentation by two guests from the AMA: Richard G. Layton of Chicago, Director of Field Services; and James S. Imboden of Columbus, Field Service Officer.

The June 8 program was the Kanawha Society's "Ladies Night" feature.

* * * *

MERCER

Dr. Nak K. Shim, an orthopedic surgeon at Bluefield Sanitarium, gave an interesting talk on hip fractures at the May 17 regular meeting of the Mercer County Medical Society at Bluefield's West Virginian Hotel.

He emphasized the use of hip protheses when aseptic necrosis of the femoral head occurs.—John J. Mahood, M. D., Secretary.

* * * *

MONONGALIA

Dr. Herman Turndorff, Chairman of the Department of Anesthesiology at the West Virginia University Medical Center, gave an informative talk on malignant hyperpyrexia at the regular May 4 meeting of the Monongalia County Medical Society in Morgantown.

Forty-one members were present at the business meeting at which Dr. Phillip B. Mathias was accepted for active membership, and Dr. Charles E. Haislip as a resident associate member.

The Society named a committee to explore the feasibility of setting up at the WVU School of Medicine a perpetual scholarship in honor of members who have died, and also directed its Secretary to take this additional action:

Lodge with the State's Congressional delegation a protest about the long list of drugs now covered by the new Bureau of Narcotics and Dangerous Drugs statute; and about the complexity of BNDD registration numbers that must be used in writing prescriptions.

Also contact the American Medical Association Council on Drugs relative to use of the word "irrational" in reference to mixture-type drugs.—William G. Klingberg, M. D., Secretary.

* * * *

TYGART'S VALLEY

An interesting program on "Surgery of Congenital Heart Disease" presented by Dr. Herbert Warden, Professor of Surgery at the West Virginia University School of Medicine, featured the April 15 meeting of the Tygart's Valley Medical Society at Iaquinta's Restaurant in Galloway.

Thirty-eight members and guests were present. The Society welcomed Dr. R. G. Co of Elkins as a new member.—A. Kyle Bush, M. D., Secretary.

At its May 20 meeting at the Elkins Motor Lodge in Elkins, the Society heard an interesting presen-

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tation on "West Virginia Medical Education: Where Do We Go From Here?" by Dr. Roland Schmidt, Acting Assistant Dean for Curriculum at the West Virginia University School of Medicine in Morgantown.

About 30 members and guests heard Doctor Schmidt discuss the Selective Experience Program which enables fourth-year WVU medical students to spend part of their time away from Morgantown, and in community hospital settings. He also explained the West Virginia Joint Council of Teaching Hospitals involvement in this program.

The Society welcomed Dr. Manuel B. Gabato of Elkins as a new member.—A. Kyle Bush, M. D., Secretary.

NEW CULTURE MEDIUM STUDIED

(Continued from Page 202)

Doctor Dyer said that these preliminary evaluations indicate comparable and satisfactory results can be obtained with the use of Transgrow medium.

When this medium is fully adopted by the Hygienic Laboratory, it is expected to prove a boon to detection of gonorrhea in West Virginia by allowing shipment of such specimens over long distances. Doctor Dyer added that this material will soon be available to all county health departments for use in venereal disease clinics.

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HARRISON

The Woman's Auxiliary to the Harrison County Medical Society installed Mrs. Robert D. Hess as its President at its May 6 monthly meeting in Clarksburg's Stonewall Jackson Hotel. About 20 members and guests were present.

Other officers include Mrs. M. V. Kalaycioglu, President Elect; Mrs. W. N. Walker, Jr., Vice President; Mrs. John D. H. Wilson, Secretary, and Mrs. E. Burl Randolph, Treasurer.—Mrs. John D. H. Wilson, Secretary.

Live Pneumonia Vaccine Tests Show Promise

A live vaccine developed at the University of North Carolina has been described as a better protection against pneumonia than killed vaccine. The presentation came at the 71st Annual Meeting of the American Society for Microbiology.

Approximately 8,000 microbiologists attending the Minneapolis, Minnesota, conference were told by Dr. Wallace A. Clyde of the UNC Infectious Disease Division: "We found evidence, using animals, that respiratory tract infection caused by live vaccine produces a greater degree of protection than does injection of killed vaccine."

Doctor Clyde explained that half of all pneumonia occurring in young adults is caused by mycoplasma pneumoniae which are among the smallest free living parasites distinct from bacteria and viruses. Although the infection is rarely fatal, it causes much lost time at work and in school.

He said killed vaccines have been used with some success in humans, but injections with these vaccines prevented only about half of infections and in some cases has shown to have adverse effects on people.

The UNC researcher placed his live mycoplasma vaccine in the noses of hamsters, which experienced no adverse reactions and showed high resistance when exposed to the disease.

OFFICERS OF COMPONENT SOCIETIES

Society	President		Secretary		Meetings
Boone	A. E. Glover	Madison	Harold H. Howell	Madison	2nd Wed.
Brooke	W. T. Booher, Jr.	Wellsburg	W. T. Booher	Wellsburg	
Cabell	Jack O. Sheppe	Huntington	Gerald E. Vanston	Huntington	2nd Thurs.
Central West Virginia	C. R. Davisson	Weston	Joseph B. Reed	Buckhannon	As Sched.
Eastern Panhandle	Robert R. Pittman	Martinsburg	D. Ewell Hendricks	Martinsburg	2nd Wed.
Fayette	Chuan H. Lee	Montgomery	Ivan H. Bush, Jr.	Oak Hill	1st Wed.
Greenbrier Valley	George S. Julias	Wht. Sul. Spgs.	John J. Yaeger	Wht. Sul. Spgs.	2nd Wed.
Hancock	Anthony A. Yurko, Jr.	Weirton	M. J. Packovich	Weirton	2nd Tues.
Harrison	Herman Fischer	Clarksburg	Robert D. Hess	Bridgeport	1st Thurs.
Kanawha	W. Alva Deardorff	Charleston	George W. Hogshead	Nitro	2nd Tues.
Logan	Juan A. Nordelo	Man	Kermit C. Ericsson	Man	2nd Wed.
Marion	Robert B. Hamilton	Fairmont	John C. Turner	Fairmont	Last Tues.
Marshall	Andrew J. Barger	Glen Dale	Daniel B. Gordon	Glen Dale	3rd Tues.
Mason	John M. Grubb	Pt. Pleasant	Aaron Boansue	Pt. Pleasant	Bi-Monthly
McDowell	Robert W. Hansen	Welch	J. C. Ray	Welch	2nd Wed.
Mercer	R. O. Rogers, Jr.	Bluefield	John J. Mahood	Bluefield	3rd Mon.
Mingo	Duane A. Schram	Williamson	William H. Carter	Williamson	2nd Wed.
Monongalia	Hugh Wiley	Morgantown	William G. Klingberg	Morgantown	1st Tues.
Ohio	George R. Clarke	Wheeling	Joseph N. Aceto	Wheeling	4th Tues.
Parkersburg Academy	Edward Shupala	Parkersburg	R. J. Bailey	Parkersburg	1st Thurs.
Potomac Valley	M. F. Townsend	Petersburg	Carl A. Liebig	Keyser	2nd Wed.
Preston	J. C. Arnett	Rowlesburg	C. Y. Moser	Kingwood	4th Thurs.
Raleigh	John M. Daniel	Beckley	James A. Gardner	Beckley	3rd Thurs.
Summers	Jack D. Woodrum	Hinton	J. W. Stokes	Hinton	3rd Mon.
Tygart's Valley	A. E. Harrington	Elkins	A. Kyle Bush	Philippi	3rd Thurs.
Wetzel	Lemoyne Caffield	N. Martinsville	C. P. Watson	N. Martinsville	Monthly
Wyoming	Ernesto Fabi	Mullens	Francisco Flores	Mullens	Quarterly

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URGENTLY NEEDED—General practitioners and pediatricians for a community of 22,000. Large industry, good schools, 5-year-old 67-bed general hospital, including a one-year-old 14-bed pediatric section. Community situated on federal interstate and very accessible in all directions. Contact LDT, The W. Va. Medical Journal, P. O. Box 1031, Charleston, W. Va. 25324.

WANTED—General practitioner to locate in Sistersville, Tyler County. A 19-bed general hospital is available; drawing area is approximately 20,000. Successful practice assured and assistance will be offered in locating office space. Call John L. Moore, Administrator, Sistersville General Hospital, collect, for particulars (304) 657-2401.

WANTED—Two general practitioners in Marlinton, Pocahontas County. A 42-bed general hospital is available. Successful practice practically assured and assistance will be offered in locating office space. Call Mr. S. E. Drumm, Administrator, Pocahontas Memorial Hospital in Marlinton, collect, for particulars (304) 799-4193.

EMERGENCY ROOM PHYSICIAN—Accredited 280-bed progressive general hospital in beautiful Huntington, West Virginia; excellent income and working conditions; contact Assistant Administrator, Cabell Huntington Hospital, 1340 Sixteenth Street, Huntington, West Virginia 25701 or Call (304) 696-6590 "collect."

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AVAILABLE—July 1, 1971, Board eligible neurosurgeon interested in solo or partnership practice. Contact CYA, The W. Va. Medical Journal, Box 1031, Charleston, W. Va. 25324. Phone (412) 687-1546.

WANTED—General practitioners, internists, some specialists in New Martinsville, W. Va. County seat with 7,000 population. Drawing area encompasses four counties, approximately 30,000. Six stable, medium to large industries. Progressive community, growing, a good place to live and raise a family. Existing hospital with 80 beds and expect to start construction on new acute care hospital in 1971. Local funds raised. Well worth investigation. Contact Dr. C. P. Watson, Secretary, Wetzel County Medical Society, 182 Maple Avenue, New Martinsville, W. Va. 26155.

WANTED—Two general practitioners and a pediatrician to locate in a rapidly growing and extremely progressive community; excellent recreational facilities; within driving distance of the larger metropolitan areas; modern 45-bed general hospital, fully equipped and staffed; qualified general surgeon in residence. Write HRL, The West Virginia Medical Journal, P. O. Box 1031, Charleston, W. Va. 25324.

WANTED—Pediatricians and family physicians, OEO Rural Health Program. Practice limited to hospital and clinics. Salary, $22,000 to $24,000. Fringe benefits. Write Medical Director, Mountaineer Family Health Plan, Inc., Box 1149, Beckley, W. Va. 25801.

WANTED—An internist and one or two general practitioners in Grafton. New hospital under construction, new school funded, new and extensive recreational facilities and new industries. Opportunity unlimited for industrious and qualified physicians. Located 26 miles from WVU Medical Center. Contact Dr. Wallace B. Murphy, Chief of Staff, Grafton City Hospital, Grafton, W. Va. 26354.

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WANTED—Board certified internists or those in the process of obtaining certification. If you qualify, please write Lonnie L. Crane, The Myers Clinic, Philippi, W. Va. 26416.

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AVAILABLE—Physician seeking full or part-time employment in clinic, hospital or as associate in practice. Licensed in West Virginia. Contact EWF, The West Virginia Medical Journal, Box 1031, Charleston, West Virginia.

PHYSICIANS WANTED—Due to death and retirement, general practitioners and all varieties of specialists are needed in Clarksburg area. Financial help provided. Contact Dr. Herman Fischer, Recruitment Committee Chairman, 224 W. Olive Street, Bridgeport, W. Va. 26330.

WANTED—A general practitioner to locate in the growing town of Fort Ashby (Mineral County) West Virginia, situated to serve the communities of Short Gap, Springfield and Green Spring. Excellent opportunity for an ambitious physician. For information on possible assistance in establishing office facilities, contact Doctor Committee, Fort Ashby Lions Club, Fort Ashby, W. Va. 26719.

WANTED—Internist urgently needed in a growing northeastern West Virginia community; drawing area is approximately 23,000; modern hospital with excellent facilities; office space available; guaranteed annual income; centrally located for vast recreational facilities. Write RLH, The West Virginia Medical Journal, P. O. Box 1031, Charleston, W. Va. 25324.

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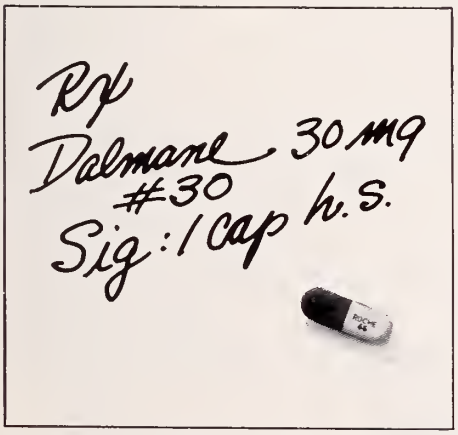
References: 1. Kales, A., *et al.*: "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. **2.** Kales, A., *et al.*: "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed): *Sleep: Physiology and Pathology*, Phila., Lippincott, 1969, p. 331. **3.** Data on file, Medical Department, Hoffmann-La Roche Inc.



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Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

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AUGUST
1971

Vol. 67 No. 8

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Official Organ of the West Virginia State Medical Association

Box 1031 Charleston, W. Va. 25324

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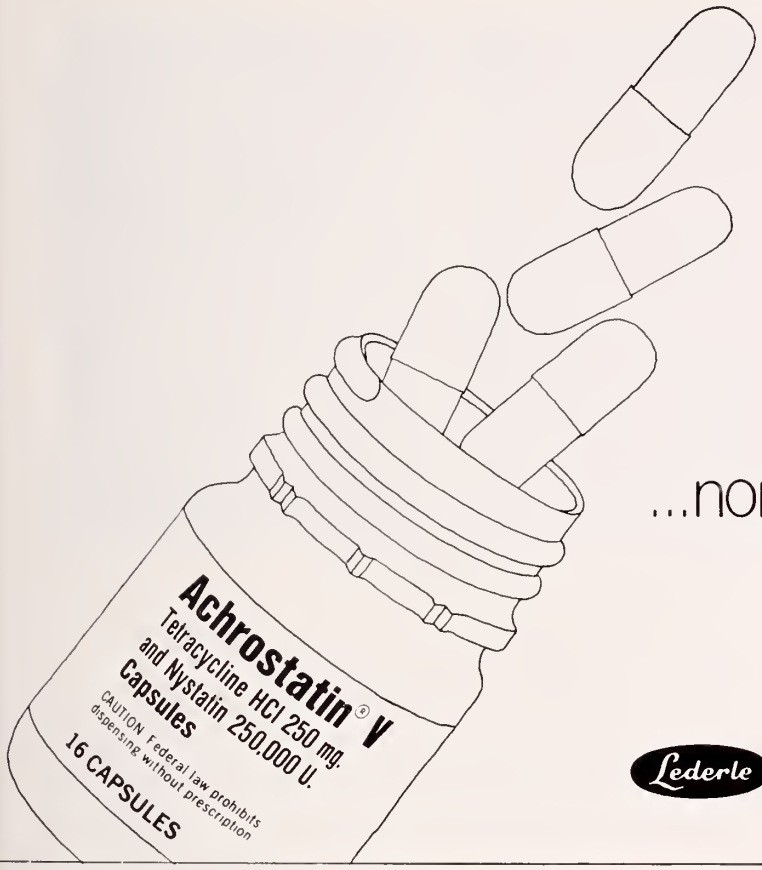

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WVU Medical Center
–News–

• **Compiled from materiol furnished by Mrs. Mary Ellin Wylie, Director, Medicol Center News ond Informotion Services, Morgantown, W. Vo.**

UNIVERSITY Hospital at West Virginia University in Morgantown has welcomed 18 physicians and two dentists to its house staff for further training as interns.

By service, the individuals, their hometowns and the schools from which they graduated are:

Straight Medicine—Dr. Maxine Baron of Warrendale, Pennsylvania, University of Pittsburgh; Dr. James F. Cipoletti, Jr., of Washington, Pennsylvania, West Virginia University; Dr. Sally M. Ehlers of Marshall, Minnesota, University of Minnesota; Dr. Nolan C. Parsons, Jr., of Belmont, WVU; Dr. Phillip J. Peters of Morgantown, WVU; Dr. Ronald R. Scobbo of Port Washington, New York, WVU; Dr. Russell M. Stewart, III, of Morgantown, WVU; Dr. Daniel E. Wolfe of Millheim, Pennsylvania, University of Pennsylvania;

Rotating Pediatrics—Dr. J. Conrad Bures of West Newton, Pennsylvania, WVU;

Straight Pediatrics—Dr. James H. Ashworth of Buckhannon, WVU; Dr. Richard Gnegy of Oakland, Maryland, WVU; Dr. Farooq H. Siddiqi of Hyderabad, India, Osmania Medical College; Dr. Mary Lee Kralovic of Ripley, Washington University;

Rotating Surgery—Dr. Josiah K. Lilly, III, of Oak Hill, WVU; Dr. Wade B. Stoughton of Morgantown, WVU;

Straight Surgery—Dr. David C. Blass of Calumet City, Illinois, WVU; Dr. Charles B. Cuono of West Caldwell, New Jersey, WVU; Dr. William C. Dressler of Hinton, WVU;

Oral Surgery—Dr. Darryl R. King of Windham, Ohio, WVU;

Rotating Dental—Dr. Steven J. Nielsen of Minneapolis, Minnesota, University of Minnesota.

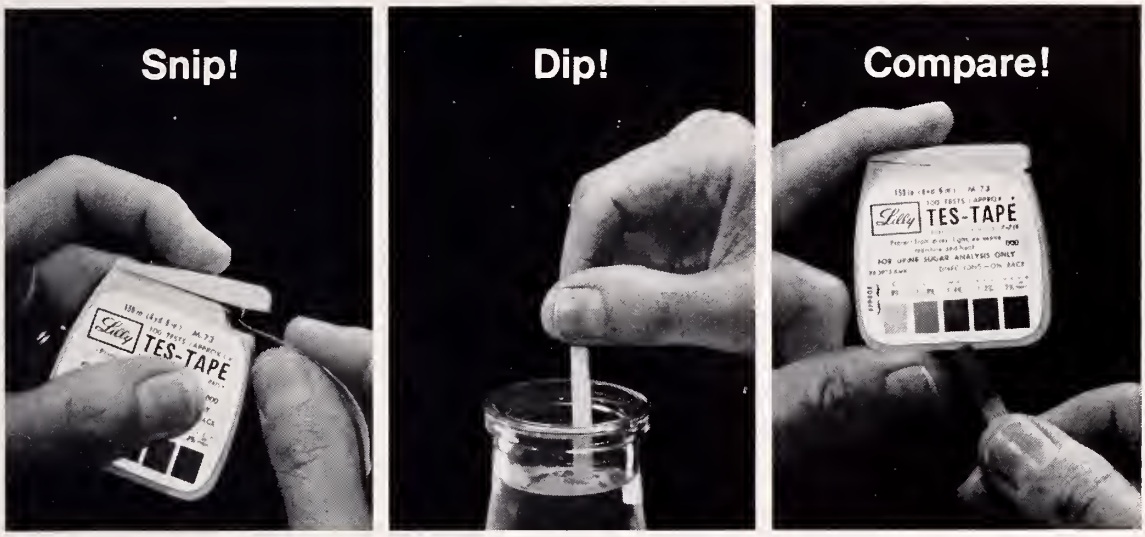
Staff Directory Prepared

For the first time in several years, the WVU Medical Center has issued a West Virginia University Hospital Medical and Dental Staff Directory.

The directory, just off the press, contains department and division listings and an alphabetical list of all staff members that includes specialty, rank and telephone number.

Mailing has been begun to every West Virginia physician and hospital. Any physician or hospital which did not receive a copy by mid-July may send a request for one to News & Information Services, West Virginia University Medical Center, Morgantown 26506.

Highlighting the West Virginia University School of Medicine's Investiture Ceremony this year was the presence of several physicians from hospitals that participate in the Selective Experience Program for fourth-year WVU medical students as members of the West Virginia Joint Council on Teaching Hospitals. In the photo at the left above, Dr. Perry M. Kalis of Wheeling (left); Dr. Andrew K. Butler, Director of Radiology at Ohio Valley General Hospital in Wheeling, and Dr. Thomas McCay of Huntington discuss matters of common interest. Doctor Kalis, like Doctor McCay a member of the WVU medical school's Class of 1971, has begun a residency in Doctor Butler's program. Doctor McCay, who also studied with Doctor Butler, has begun an internship at Akron, Ohio, City Hospital. Pictured in the right photo above are (from the left) Dr. Roland M. Schmidt, Acting Assistant Dean for Curriculum at the WVU School of Medicine; Dr. Mary Belle Taylor of Quinwood, Class of 1971; Dr. Daniel Mairs, Director of Obstetrics and Gynecology at Charleston Memorial Hospital; Dr. Evelyn Melnik of Hemphill, Class of 1971; Dr. Herbert H. Pomerance, Director of Pediatrics at Charleston Memorial Hospital, and Mrs. Mairs. Doctors Taylor and Melnik, and two of their classmates, Drs. James K. Egnor of Branchland and William T. McClellan of Charleston, are interning at Charleston Memorial.



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The Month in Washington

• **From the Washington Office of the American Medical Association.**

THE Congress has been asked by the Administration to authorize an additional expenditure of $155 million for the control of drug addiction. In his special message to the House and Senate, President Nixon said: "If we cannot destroy the drug menace in America, then it will surely destroy us."

The Administration's program would:

—Make Veteran's Administration facilities available to all former servicemen in need of drug rehabilitation regardless of the nature of their discharge and provide $14 million for this program.

—Seek $105 million from Congress to be used solely for treatment and rehabilitation of drug addicts.

—Request an additional $10 million to improve education programs on dangerous drugs.

—Request special legislation permitting the government to use information obtained by foreign police and other technical measures to make it easier to prosecute drug pushers.

—Ask for an additional $25.6 million for the Treasury Department to expand efforts against smugglers.

—Request $2 million to expedite research and development of detection equipment and techniques.

—Request $2 million for the Agriculture Department to develop herbicides that would destroy narcotics-producing plants.

—Request $1 million for assistance to other nations in training law enforcement officers.

Implicit in the Presidential drug control proposal is the endorsement of the use of methadone in the treatment of Vietnam veterans addicted to heroin. This high level sanction of the heretofore somewhat controversial and experimental use of methadone marks a turning point in the nation's attempt to rehabilitate addicts. Observers believe the decision to make wide-scale use of methadone was influenced by official recognition of the discouraging low "cure" rate from other approaches to the problem.

Named by the President to head the new drug control program was Jerome H. Jaffe, M. D., a Chicago psycholopharmacologist and Director of the Illinois State Drug Abuse Program. Doctor Jaffe, an advocate of the methodone treatment method, will serve as a White House consultant until the new agency is organized.

Shortly after the announcement of the new drug control program, President Nixon asked the American Medical Association's House of Delegates, meeting in Atlantic City, to join in the nationwide war on drug abuse.

After detailing at some length the growing social dangers of drug abuse, the President said that there was a link between the inappropriate use of drugs within the medical context and the abuse of drugs outside that context.

"Consider these facts for a moment: In the last four years alone, the production and distribution of tranquilizers in our country has doubled. During 1970, 5 billion doses of tranquilizers, 3 billion doses of amphetamines and 5 billion doses of barbiturates were produced in this country. Listen to this: The estimate is that 50 per cent of the amphetamines and barbiturates were diverted into illegal sales. So there is a problem in the terms of education as well as enforcement.

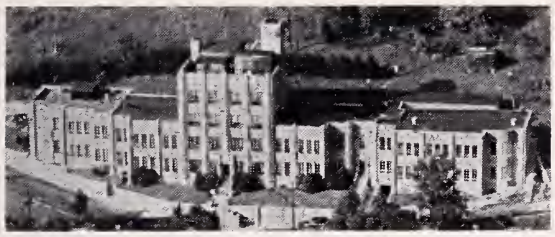
"Tranquilizers, amphetamines and barbiturates, as you know, are known as psychotropic or mind-altering drugs. It is estimated that one-third of all Americans between the ages of 18 and 74 used a psychotropic drug of some type last year. And little wonder—for there were enough drugs of this type available last year to medicate every adult in the United States at very high dosage rates for more than 11 days.

"We have produced an environment in which people come naturally to expect that they can take a pill for every problem—that they can find satisfaction and health and happiness in a handful of tablets or a few grains of powder."

In addition to his call to physicians to assist in the drug control program, the President in his Atlantic City address also challenged organized medicine to provide the leadership "this country craves for" in all areas of health care.

"The health of America is in your hands, and by its health I speak not just of its physical health (but) its mental health, its moral health, its character," the President said.

In immediate response to the President's challenge to American Medicine, the AMA's special communications program answered the Chief Executive's call for physician leadership in a full-page message that appeared in many of the nation's principal newspapers. The message, titled "We accept, Mr. President", responded point-by-point to Mr. Nixon's request for broad physician support in all aspects of the nation's health.



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Obituaries

GIDEON S. DODDS, Ph. D.

Dr. Gideon Stanhope Dodds, a member of the West Virginia University School of Medicine faculty from 1918 until his retirement in 1951, died June 24 in Paris, Illinois. He was 90.

Doctor Dodds was a native of Westmoreland County, Pennsylvania. He received his undergraduate and master's degrees from the University of Colorado in 1904 and 1905, and his Ph. D. degree from the University of Pennsylvania.

He taught at St. Louis University and the University of Missouri before joining the WVU faculty as an Assistant Professor of Histology and Embryology. He held the rank of Professor from 1925 until his retirement.

RICHARD J. STEVENS, M. D.

Dr. Richard J. Stevens, who had been in the practice of internal medicine in Huntington since 1941, died June 17 in a hospital there. He was 61.

A native of Portsmouth, Ohio, Doctor Stevens held a Bachelor of Science Degree from West Virginia University; a Master of Science Degree from the University of Cincinnati, and received his medical degree from Rush Medical College in Chicago, Illinois.

He interned at Mercy Hospital in Pittsburgh, and was an instructor at the University of Cincinnati Medical School for two years. He was a Diplomate of the American Board of Internal Medicine, and a member of the Cabell County Medical Society; West Virginia State Medical Association; the American Medical Association, and the Southern Medical Association.

Doctor Stevens is survived by his widow, Dr. Sarah L. C. Stevens; four sons, Ralph, Robert, Randall and Richard J. Stevens, Jr., all of Huntington; three daughters, Mrs. Jeff Helberg of Dallas, Texas, and Miss Mary Alice and Miss Johanna Stevens, both of Huntington; and two brothers, Joseph G. Stevens of Clearwater, Florida, and Ralph A. Stevens of Portsmouth, Ohio.

Family Planning by Valve?

Animal trials are underway at the New York Medical College in New York City with a contraceptive valve designed for permanent implantation in men which may allow family planning simply by turning the valve on or off.

Drs. Matthew Freund and William Ventura have placed their gold and stainless steel, pin-head size valves in guinea pig vas deferens—a pair of tubes which transport sperm—without any apparent nerve or tissue damage. The investigators anticipate that after implantation, to shut or open the valve will require a simple 15 minute operation in a doctor's office.

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County Societies

CABELL

Dr. William Kiser, of the Cleveland Clinic in Cleveland, Ohio, presented an interesting summary of current thinking about the surgical approach to renal artery stenosis and hypertension at the regular June 10 meeting of the Cabell County Medical Society at Huntington's Frederick Hotel.

During its business meeting, the Society delayed until September further consideration of a proposal to establish a non-tax exempt trust fund which it would administer; and heard its President, Dr. Jack Sheppe, urge support for the candidacies of two of its members: Dr. C. A. (Carl) Hoffman, seeking election as President-Elect of the American Medical Association, and Dr. Jack Leckie for Vice President of the West Virginia State Medical Association.—G. E. Vanston, M. D., Secretary.

* * * *

TYGART'S VALLEY

A number of outstanding speakers featured the 22nd Annual Post Graduate Session of the Tygart's Valley Medical Society at Tygart Lake Lodge, near Grafton, on June 17. One hundred and five physicians and guests attended a dinner session which concluded the program, with Society members welcoming Dr. George R. Callender, Jr., of Charleston, President of the West Virginia State Medical Association.

Speakers and their topics at the afternoon meeting were Dr. John Lawler of New York City, Field Representative for the American College of Surgeons, "The Cancer Registry;" Dr. Donald R. Gilbert, Chairman, Department of Urology, Charleston Memorial Hospital in Charleston, "Current Concepts of Urinary Tract Infection," and Dr. Donald C. Carter, Associate Professor of Psychiatry and Behavioral Medicine and Director, Department of Psychiatry Out-Patient Clinic, West Virginia University in Morgantown, "When and How to Use Psychotherapeutic Drugs."

Dr. Patrick W. Gainer, Professor of English at WVU, presented "Folk Songs of the Allegheny Mountains" at the dinner meeting.—A. Kyle Bush, M. D., Secretary.

Uterus Transplantation

A group of researchers at the University of Iowa Hospitals in Iowa City have had some degree of success in transplantation of a non-vital organ—the uterus—in rhesus monkeys, according to the National Society for Medical Research. Dr. James R. Scott said the present study was done to evaluate surgical techniques for transplanting the uterus and fallopian tubes and to investigate rejection characteristics.

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C. D. PRUETT, M. D.
R. O. ROGERS, JR., M. D.

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JOHN J. BRYAN, M. D.

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GEORGE C. KING, M. D.
BRENNAN PURKALL, JR., M. D.

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DAVID H. GATHERUM, M. D.

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Society	President		Secretary		Meetings
Boone	A. E. Glaver	Madisan	Harold H. Hawell	Madisan	2nd Wed.
Braake	W. T. Booher, Jr.	Wellsburg	W. T. Booher	Wellsburg	
Cabell	Jack O. Sheppe	Huntington	Gerald E. Vanston	Huntingtan	2nd Thurs.
Central West Virginia	C. R. Davissan	Westan	Joseph B. Reed	Buckhannan	As Sched.
Eastern Panhandle	Rabert R. Pittman	Martinsburg	D. Ewell Hendricks	Martinsburg	2nd Wed.
Fayette	Chuan H. Lee	Montgomery	Ivan H. Bush, Jr.	Ook Hill	1st Wed.
Greenbrier Valley	Geerge S. Julias	Wht. Sul. Spgs.	Jahn J. Yaeger	Wht. Sul. Spgs.	2nd Wed.
Hancock	Anthany A. Yurka, Jr.	Weirtan	M. J. Packavich	Weirtan	2nd Tues.
Harrisan	Herman Fischer	Clarksburg	Rabert D. Hess	Bridgeport	1st Thurs.
Kanawha	W. Alva Deardorff	Charleston	George W. Hagshead	Nitro	2nd Tues.
Logan	Juan A. Nardelo	Man	Kermit C. Ericssan	Man	2nd Wed.
Marian	Rabert B. Hamiltan	Fairmont	Jahn C. Turner	Fairmant	Last Tues.
Marshall	Andrew J. Barger	Glen Dale	Daniel B. Gardon	Glen Dale	3rd Tues.
Masan	Jahn M. Grubb	Pt. Pleasant	Aarom Baonsue	Pt. Pleasant	Bi-Monthly
McDawell	Rabert W. Hansen	Welch	J. C. Ray	Welch	2nd Wed.
Mercer	R. O. Rogers, Jr.	Bluefield	Jahn J. Mahoad	Bluefield	3rd Mon.
Mingo	Duane A. Schram	Williamson	William H. Carter	Williamsan	2nd Wed.
Manangalia	Hugh Wiley	Morgantown	William G. Klingberg	Margantown	1st Tues.
Ohia	Geerge R. Clarke	Wheeling	Joseph N. Aceta	Wheeling	4th Tues.
Parkersburg Academy	Edward Shupala	Parkersburg	R. J. Bailey	Parkersburg	1st Thurs.
Patomac Volley	M. F. Tawnsend	Petersburg	Carl A. Liebig	Keyser	2nd Wed.
Preston	J. C. Arnett	Rawlesburg	C. Y. Maser	Kingwood	4th Thurs.
Roleigh	John M. Daniel	Beckley	James A. Gardner	Beckley	3rd Thurs.
Summers	Jack D. Woodrum	Hinton	J. W. Stakes	Hintan	3rd Mon.
Tygart's Valley	A. E. Harringtan	Elkins	A. Kyle Bush	Philippi	3rd Thurs.
Wetzel	Lemayne Caffield	N. Martinsville	C. P. Watsan	N. Martinsville	Monthly
Wyaming	Ernesto Fabi	Mullens	Francisca Flores	Mullens	Quarterly

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James A. Gardner, M. D.

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Clifford A. Stevenson, M. D.
Jose C. Campa, M. D.
S. A. Zahir, M. D.

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Warren D. Elliatt, M. D.
Owen C. Meadows, M. D.
Rabert P. Pulliam, M. D.

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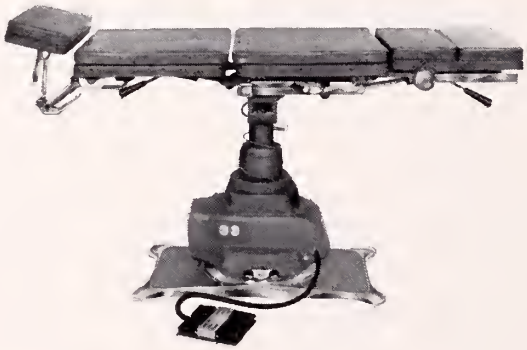

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New Evidence Links Smoking To Heart Disease

A Philadelphia General Hospital research team has strengthened the link between cigarette smoking and heart disease by measuring the effect of that habit on ventricular fibrillation—a malfunction preventing coordinated heart contractions—in dogs.

Dr. Samuel Bellet, Director of the hospital's Division of Cardiology, reported his team's findings at the 120th annual American Medical Association meeting in Atlantic City, New Jersey, in June.

"Although cigarette smoking has been found to represent an important risk factor for the development of coronary heart disease, sudden death has been found to be particularly frequent in heavy cigarette smokers," he said.

Doctor Bellet told the National Society for Medical Research News Service it is because of this, and the fact that ventricular fibrillation is believed to be the cause of most sudden deaths in coronary patients, that his group began this study.

Before determining the effect of smoking on this malfunction, it first was necessary to establish each animal's vulnerability to ventricular fibrillation (VF). This was done by subjecting each dog's heart to an electrical impulse. The VF threshold was considered to be the minimum amount of energy needed to induce fibrillation for at least 10 seconds.

Both normal dogs and those with induced acute myocardial infarction were then attached to a special smoking device.

Each animal was then tested several times to determine its VF threshold changes over a period of time after inhalation.

According to Doctor Bellet, a decrease of 30 to 40 per cent in the amount of energy necessary to induce fibrillation occurred in smokers, indicating the increased vulnerability of their hearts to this malfunction. He says the effect of cigarette smoke was evident 30 minutes after inhalation, became maximum at about 45 minutes and lasted for about 90 to 120 minutes.

Doctor Bellet says he feels this is roughly what happens in human subjects, both normal and those with acute myocardial infarction, when they smoke cigarettes.

These studies, underway since 1968, have been supported by the National Institutes of Health, the American Medical Association and the tobacco industry's Council for Tobacco Research, U. S. A.

Mercury Poisoning Preventative

There is no antidote for methyl mercury poisoning, but a preventive agent which is effective in removing mercury from mice before it can reach lethal concentrations has been reported, according to the National Society for Medical Research. Dr. Thomas W. Clarkson of the University of Rochester, New York, says the agent, a polystyrene resin, is added to the food of the mice. He reported these findings at a seminar held at Argonne National Laboratory in Illinois.

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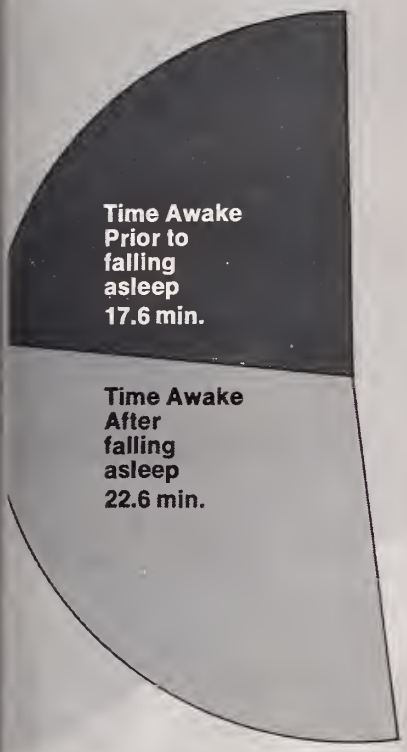

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eep percent	88.6	94.5

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Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

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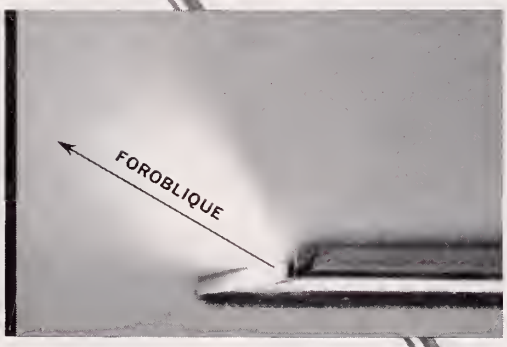

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WVU Medical Center
—News—

• **Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.**

SELECTION of students for the 76 places in the West Virginia University School of Medicine's 1971 first-year class has been completed by the Student Admissions Committee. As in previous years, it was a formidable task.

Replies were made to all 1,339 inquiries, and partial applications were submitted by 672. Of the 303 firm applications received, 287 were interviewed, including all 204 West Virginians.

Seventy-three members of the new class are West Virginians. Two are from Pennsylvania, and one is from Maryland. Two of the out-of-state students completed their undergraduate work at WVU.

The 70 men and six women, who began classes in late August, have a grade point average of 3.25 (B plus). Selection was based on scholastic standing, Medical College Admission Test (MCAT) scores and the results of interviews.

The Student Admissions Committee is composed of five basic sciences faculty members, five clinicians and two students. Dr. Reginald Krause, professor and Chairman of the Department of Biochemistry, who has served as Committee Chairman since 1959, will be succeeded next year by Dr. James D. Martin, Associate Professor of Neurology.

Here are the West Virginians admitted to the School of Medicine's 1971 freshman class:

BARBOUR COUNTY—John William Treharne, of Philippi.

BERKELEY COUNTY—Joseph Bruce White, of Martinsburg.

BROOKE COUNTY—Paul Eugene Van Duke, of Wellsburg.

CABELL COUNTY—Marshall Lynn Burke, of Culloden; and James Mitchell Griffin and Charles Henry Hagan, both of Huntington.

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GILMER COUNTY—Albert Burr Churchill Flemming, II, of Glenville.

GRANT COUNTY—Daniel Benjamin Alt, of Petersburg.

GREENBRIER COUNTY—Houston Burger Moore, Jr., of Lewisburg.

HAMPSHIRE COUNTY—Paul Parker Williams, of Romney, and Gary Leo Wagoner, of Springfield.

HANCOCK COUNTY—Michael Vincent Keefe, Keith Arnold Recht, and Robert Francis Webb, all of Weirton.

HARRISON COUNTY—Robert Clayton Thompson, Jr., and Patricia Ann Walker, both of Bridgeport; and Timothy Alden Brown, and Janis Page White, both of Clarksburg.

KANAWHA COUNTY—Stephen Alan Lewis, David Lee Namay, Thompson Embleton Pearcy, Robert William Rectenwald, II, Joel Mayer Zacks, and Steven Michael Zekan, all of Charleston; Jack Meadows Metheny, II, of Clendenin; Benjamin Mitchell Edwards, and Robert Dale Johnson, both of St. Albans; and Paul Wells Gerke, Edmund Carr Settle, Jr., and Curtis Desmond White, all of South Charleston.

MARION COUNTY—Michael Jackson Little, of Fairmont.

MARSHALL COUNTY—David Lee Sustarsic, of Benwood and Ernest Jerome Bonitatibus, of McMechen.

MASON COUNTY—Alan Van Fisher, and Samuel Parrish McNeill, both of Point Pleasant.

McDOWELL COUNTY—Charles John Mirabile, of Gary.

MERCER COUNTY—Howard Allen Leedy, and Richard William Ward, both of Bluefield; and Danny Ray Wills, of Princeton.

MINERAL COUNTY—David Robert Chapman, of Keyser.

MONONGALIA COUNTY—Gregory Sterling Carter, Thomas Samuel Clark, William Barry Cline, David Alan Lynch, Alden Gay McBee, Ronald Keith Mayfield, David Michael Morgan, Gina Michelle Puzzuoli, Louis Rishel and James Michael Wertman, all of Morgantown.

NICHOLAS COUNTY—Norma Jean Mullins, of Tioga.

OHIO COUNTY—Robert Brann Altmeyer, Sandra Kay Griffith, Bradley Kaye Joseph, Dean John Nickles, Robert Elwood Norman, Jr., John Palmer David Shemo, John Joseph Wurtzbacker and Robert John Zaleski, all of Wheeling.

PLEASANTS COUNTY—Michael Justin Lewis, of St. Marys.

RALEIGH COUNTY—Phillip Paul Luchini, of Beckley.

RANDOLPH COUNTY—Samuel Kump Roberts, of Elkins.

(Continued on Page xxvi)

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The Month in Washington

• **From the Washington Office of the American Medical Association.**

THE American Medical Association supported President Nixon's legislation to create a special White House office to coordinate the Federal government's fight against drug abuse "as an important element of the national campaign."

The AMA support was outlined by Dr. Maurice H. Seevers, Chairman of the Department of Pharmacology at the University of Michigan and a member of the AMA Committee on Alcoholism and Drug Dependence, before the House Public Health and Environment Subcommittee. He was accompanied by Dr. Richard E. Palmer, a member of the AMA Board of Trustees.

Doctor Seevers said that "under Dr. Jerome Jaffe's able direction, the (White House) Special Action Office can become a most effective instrument" in achieving the purpose of the legislation:

" . . . to focus the comprehensive resources of the Federal government and bring them to bear on drug addiction and drug abuse with the immediate objective of promptly and significantly reducing the incidence of drug addiction and drug abuse in the nation within the shortest possible period of time."

"We have two additional observations regarding this stated objective," Doctor Seevers said. "First, although prompt and decisive action is to be desired as a goal, it should be clearly recognized that there are no panaceas for the prevention or successful treatment of drug dependence. Drug dependence is a complex phenomenon that does not lend itself to quick or simplistic solutions." He added:

"Our second observation is related to that fact: Well-conceived, multi-faceted research is needed on a broad scale to devise effective means of coping with this problem.

"With respect to the drugs themselves, while much is known about their properties, relatively little is known about their precise mode of action in the human organism and the exact nature of the long-term effects of their regular use by man.

"While some of the factors which lead individuals to abuse drugs are understood, science is not yet able to predict who may be vulnerable to drug dependence. The role of drug abuse within the context of a total life style also needs to be more clearly delineated.

"Much work remains to be done in developing new, and evaluating existing, treatment methods in terms of the therapeutic needs and psychosocial makeup of the individual patient. Physicians can treat the acute effects of drug abuse and drug dependence, often preventing serious physical and psychological consequences; but medical and sociological management techniques have not been developed so as to insure that a significant number of patients will not return to abuse of drugs and to their patterns of dependence after the acute symptoms have been abated through treatment.

"Methods of 'reaching out' to the young drug abuser must be tested to ascertain the most effective courses that educators, physicians and those in other professions can pursue.

"Finally, a great deal more work should be carried out with human subjects. Especially needed are longitudinal studies encompassing etiology, diagnosis, treatment and after-care, even though such studies would require an extended period of years."

Doctor Seevers cautioned that "the technique of treating heroin dependence through methadone maintenance, although offering hope and the possibility of social rehabilitation to a number of dependent persons, is but one of several modalities which can be useful".

More Pay for Military Doctors

Dr. Richard S. Wilbur, new Assistant Secretary of Defense for Health and Environment, proposed that the military services pay physicians substantially more to avoid a severe shortage of medical skills when the services switch to an all-volunteer basis in mid-1973.

Doctor Wilbur, who succeeded Doctor Rousselot in the Defense Department's top medical post, is on leave of absence as the American Medical Association's Deputy Executive Vice President.

At his confirmation hearing, Doctor Wilbur told the Senate Armed Services Committee that the health and environmental problems of the Defense Department cannot be entirely separated from those of the civilian population. Among the major problems facing Doctor Wilbur in his new post are filling the armed services' needs for physicians, drug addiction in the services and whether there should be a military medical school.

(Continued on Page xxvi)

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Fulvia Franyutti, M. D.

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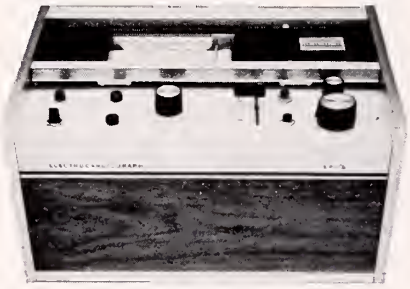

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Obituaries

WILLIAM D. BOURN, M. D.

Dr. William D. Bourn, 72, of Barboursville died August 2 in a Richmond, Virginia, hospital.

A native of Frametown in Braxton County, Doctor Bourn held A. B. and B. S. degrees from West Virginia University, and received his medical degree from the Emory University School of Medicine in Atlanta, Georgia.

Doctor Bourn interned at Wheeling Hospital, in Wheeling, in 1933-34. He was a member of the Cabell County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Survivors include his widow; two daughters, Mrs. R. E. Ryan of McLean, Virginia, and Mrs. Sharon Ketchun of Columbus, Ohio; a son, James Dewey Bourn, of Fort Pierce, Florida, and a brother, John Bourn, of Orlando, Florida.

* * * *

A. B. CURRY ELLISON, M. D.

A long illness resulted August 3 in the death of Dr. A. B. Curry Ellison, a Charleston internal medicine specialist. He was 57.

Doctor Ellison was a native of Ronceverte. He received his undergraduate degree from West Virginia University, and his medical degree from Rush Medical College in Chicago in 1941.

A resident of Charleston since 1948, Doctor Ellison also held a master's degree from the University of Minnesota; interned at Presbyterian Hospital in Chicago, and did postgraduate work at the Mayo Clinic in Rochester, Minnesota.

Doctor Ellison was a member of the Kanawha Medical Society, West Virginia State Medical Association and American Medical Association. He was a Past President of the West Virginia Society of Internal Medicine.

He is survived by his widow and two sisters, Mrs. H. H. Spencer, Sr., of Richwood and Mrs. Leona Bonin, Ronceverte.

* * * *

MERRILL R. FOX, M. D.

Dr. Merrill R. Fox, 76, a retired Washington, D. C., physician who formerly practiced in Charleston and Charles Town, died June 25 at a Washington convalescent home after a long illness.

A native of Oakdale, Pennsylvania, Doctor Fox received his M. D. degree in 1924 from the Johns Hopkins University School of Medicine in Baltimore, Maryland.

He interned at the U. S. Naval Hospital in Chester, Massachusetts, and practiced in Payette, Idaho, before spending two years in Charleston in 1935-36. He was a veteran of both World Wars, and was

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Medical Director at the Newton D. Baker Veterans Administration Center in Martinsburg, and at a VA facility in Lake City, Florida, for 12 years.

Doctor Fox was a former member of the Eastern Panhandle Medical Society, the West Virginia State Medical Association and the American Medical Association.

He is survived by his widow; a son, Merrill R. Fox, II, of Rockville, Maryland, and a daughter, Mrs. Louise Tiller of Washington.

* * * *

D. A. MacGREGOR, M. D.

Dr. D. A. MacGregor, President of the West Virginia State Medical Association in 1933 and associated with the Wheeling Clinic in Wheeling from 1924 until 1959, died July 24 in a rest home near Chatham, New Jersey.

The internal medicine specialist, who was 83, was a native of Escanaba, Michigan. He held an A.B. degree from Yale University in New Haven, Connecticut, and received his M. D. degree in 1913 from the old Western Reserve University School of Medicine in Cleveland, Ohio.

Doctor MacGregor was a former Secretary and President of the Ohio County Medical Society, and was an honorary member of that organization, as well as the West Virginia State Medical Association and the American Medical Association, at the time of his death.

He also was a former Secretary and Council member of the State Medical Association, and a member of the West Virginia Board of Health in the 1950s and early 1960s.

Survivors include three daughters, Mrs. Jean Henderson of Chatham, New Jersey; Mrs. Charles Ney of Glenview, Illinois, and Mrs. C. J. Budney of Newburg, New York.

* * * *

LEO M. SELTZER, M. D.

Dr. Leo M. Seltzer, 55, a Charleston obstetrician and gynecologist, died July 21 after suffering a heart attack while playing tennis. He had practiced in Charleston since 1949.

A native of Fairfield, Maine, Doctor Seltzer had an A. B. degree from Colby College in Waterville, Maine, and an M. D. degree from the University of Vermont College of Medicine.

He did additional graduate work at the University of Pennsylvania's Graduate School of Medicine in Philadelphia and the Johns Hopkins University Hospital and Medical School in Baltimore, Maryland.

A Diplomate of the American Board of Obstetrics and Gynecology, and a veteran of World War II service as a U. S. Army Major, Doctor Seltzer was a member of the Kanawha Medical Society, the

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James P. Bland

West Virginia State Medical Association and the American Medical Association.

He is survived by his widow; a son, Bruce, at home; a brother, Dr. Joseph P. Seltzer, also a Charleston physician, and four sisters.

* * * *

WILLIAM A. THORNHILL, JR., M. D.

Dr. William A. Thornhill, Jr., an internal medicine specialist and resident of Charleston since 1917, died July 19 of a heart attack in his Charleston offices. He was 61.

A native of Lawton in Fayette County, Doctor Thornhill held A. B. and B. S. degrees from West Virginia University, and received his M. D. degree from the Cornell University Medical College in New York City in 1934. He served an internship at Temple University Hospital in Philadelphia, Pennsylvania, in 1934-36.

A veteran of World War II service as a U. S. Navy medical officer, Doctor Thornhill was certified by the American Board of Internal Medicine in 1945. He was a member of the Kanawha Medical Society, West Virginia State Medical Association and American Medical Association.

Doctor Thornhill also was the first President of the West Virginia Heart Association in 1948; was a Past President of the West Virginia Society of Internal Medicine; was Vice President of the American Therapeutic Society, and was a Fellow of the American College of Physicians.

Survivors include his widow; a son, Dr. Thomas S. Thornhill of Boston, Massachusetts; and two daughters, Mrs. Larry Soller of Athens, Georgia, and Miss Martha J. Thornhill, a student at Arizona State University in Tempe, Arizona.

WEST VIRGINIA MEDICAL CENTER

(Continued from Page xviii)

WAYNE COUNTY—David Lee Porter, of Kenova.

WEBSTER COUNTY—Michael Lynn Halstead, of Webster Springs.

WETZEL COUNTY—Terrell Lee Coffield, of New Martinsville.

WOOD COUNTY — William Phillip Blocker, Thomas Watson Jernigan, David Grant Johnson and John Thomas Slevin, all of Parkersburg; and James Madison Dauphin and Ruby Ann Grimm, both of Vienna.

WYOMING COUNTY—Samuel Easely Webster, of Mullens.

The out-of-state students accepted are Harry Ernst Walkup, Jr., of Worton, Maryland; Bernard John Imrich, Bobtown, Pennsylvania, and Mark Wilson McCormick, Greensburg, Pennsylvania.

Book Reviews

SHOULD DOCTORS PLAY GOD?—Edited by Claude A. Frazier, M. D. Broadman Press, 127 Ninth Avenue, North, Nashville, Tenn. 1971. Price $4.50.

This collection of 15 essays on various problems faced in the practice of medicine today, written by doctors of medicine, psychology and theology, was assembled and edited by Claude A. Frazier, M. D., an allergist of Ashville, North Carolina, whose father is a retired West Virginia physician. It is difficult to review the book without attempting to editorialize; but, as the editor states, the purpose of the book is to raise problems not to solve them.

Doctor Frazier presents the book for laymen, clergymen, and physicians; but, as only the more advanced technology is presented, I feel that the audience is severely limited. If we accept the dogma of many Christians that there is some God in all men, we would answer the title question unequivocally, "Yes!" It might be debated whether the title should be, "Should Doctors Play God? (the God of light)"; "Should Doctors Play Satan? (the God of darkness)"; or "Should Doctors Pray for the Strength to Follow the Golden Rule in All Patient Relations?"

With scientific discovery the practice of medicine daily becomes more and more science and less and less art. As one essayist points out the Greeks spoke of the Cult of Aesculapius (The Clinical Model), the Cult of Hygeia (The Public Health Model), and the Dogmatists (The Science Model). This published collection emphasizes the latter and points out the moral decisions to be made in organ transplants, abortions, genetic counselling, euthanasia, dangerous experimentation, and other phases of life pertaining to medicine and morals. It is to be hoped that we will not neglect the moral issues in lesser problems which patients present every day to their physicians.
—William L. Cooke, M. D.

THIS MONTH IN WASHINGTON

(Continued from Page xx)

He told Pentagon newsmen that he opposes establishment of such a school at this time. It has been a favorite project of Chairman Edward Hebert, Democrat of Louisiana, of the House Armed Services Committee and Doctor Rousselot. Doctor Wilbur said he was not enthusiastic about a military medical school because it would not begin producing enough doctors to be worthwhile for many years.

Doctor Wilbur predicted that the military will have "a severe health care shortage when the draft is gone" unless something is done about it.

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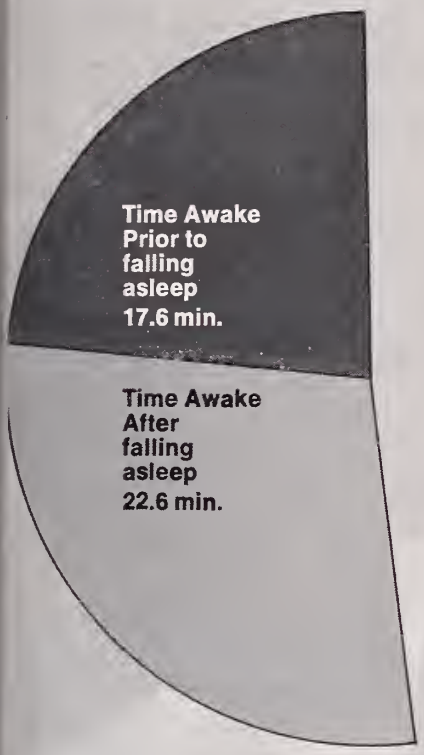

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OCTOBER
1971

Vol. 67 No. 10

The WEST VIRGINIA Medical Journal

Official Organ of the West Virginia State Medical Association

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Member 1971

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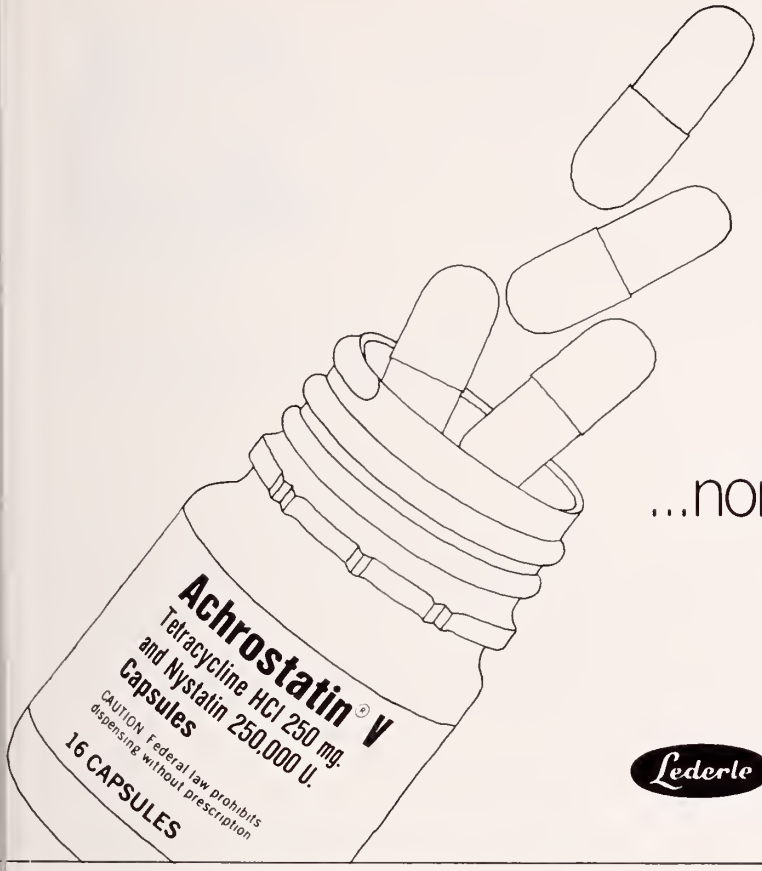

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WVU Medical Center
–News–

• Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.

THERE will be no A's this year for students in the West Virginia University School of Medicine. There won't be any B's, C's, D's, E's or F's, either. Beginning with the fall semester, students' academic and clinical performance will be assessed as Satisfactory (S) or Unsatisfactory (U). After a year's trial, an evaluation will be made to determine advantage or disadvantage as a basis for continuation.

The change in student evaluation is actually an extension of a concept which has been in effect for the past year for the fourth-year class, Dr. Frank W. McKee, Dean of the School of Medicine, explained.

Fourth-year students, under a selective program begun in 1970, may spend varying periods away from the Medical Center in West Virginia hospitals or other institutions. Standard grade assessment in such clinical situations has been impractical, if not impossible, according to Doctor McKee.

"We want to encourage the students to strive for accomplishment and competency rather than grades. The change is a means to a general improvement rather than an action to make a few people happy," he said.

Faculty Sets Policy

The new policy was recommended by the Educational Program Committee and adopted by the faculty by a vote of 37-23. The Educational Program Committee is composed of six faculty and two student members. There are also two students who serve primarily as observers.

The system is now in effect for the third-year class, which began its clinical training in June, as well as the fourth-year students.

Improvement in faculty-student relationship and student attitudes toward each other were cited by Doctor McKee as the basic reasons the new approach to grading is being introduced. He noted that students admitted to medical school come from a pool of highly selected candidates, all adjudged to be intellectually capable of completing the full course of medical education.

"The events that may lead to individual failure or ultimate dismissal are rarely on intellectual grounds, although they may appear or be made to appear to be," he said. "Emotional problems, unwillingness to accept the discipline of the profession, incapability of assuming heavy responsibility, lack of personal ability, aversion to grief or sorrow, or just a change in career goals, account for most dissociations of the students and the preparatory process.

"The reliance on an absolute of numbers, letters or symbols carries a desirable feeling of security for both teacher and student, even though secretly there is room for considerable doubt," Dean McKee added. "So we kid ourselves with a fetish for over pretended accuracy based all too often on concealed uncertainty."

Student Assessment

Under the S-U system, faculty members will present their assessments of students in written reports to the dean's office. Performance records will also be kept.

Dean McKee decried "invidious competition for grades which spoils relationships between students." "Hopefully, we will take away some of the bad aspects of grade mongering," he added.

Dean McKee and the faculty realize that there are problems inherent in such a change. "We are challenging a rigid system that our students have been in for at least 16 years, where the grade has been the stimulus for achievement. Motivation now should arise from professional goals," he said.

"We are trying to do within the confines of this school what is useful and practical. The system will not necessarily work in all schools. The change is an effort to correct internal attitudes which create tension, unrest and insecurity," he added.

How Important Are Grades?

The relative importance of traditional grades in the context of what medical education is all about is being questioned.

As Doctor McKee points out, "It is always interesting to ask individuals or groups, in public or private, student or matured physicians—'How many patients are ever concerned with a physician's grade in a particular course or even his over-all recorded average?' In reality, hardly anyone is. Further, do we have any support for the supposition that academic grade records, in and of themselves, satisfy or correlate with any prediction we might make or have made about an individual's quality and success as a physician?"

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The Month in Washington

• **From the Washington Office of the American Medical Association.**

PRESIDENT Nixon's sweeping economic proposals have pushed aside chances for Congressional hearings on national health insurance until after the first of 1972. Four of the Nixon economic proposals require legislative action, and this will keep the House Ways and Means Committee busy at least through September, and probably longer. Coupled with the Congress' announced intention on adjourning in late October or early November, this could delay congressional action on national health insurance until late 1972, or possibly until the convening of a new Congress in 1973.

While the House Ways and Means Committee considers the Nixon economic proposals, the Senate Finance Committee will consider the Social Security Amendments (H. R. 1) already passed by the House. Chances are that the Senate will delete the Administration's welfare proposals (Family Assistance Plan) from H. R. 1 and add the Professional Standards Review Organization proposal offered last year by Republican Sen. Wallace F. Bennett of Utah. Enactment of this legislation prior to adjournment is considered likely.

Also considered likely to be enacted prior to adjournment are the health manpower bills presently in conference. This legislation would authorize an estimated $3.3 billion in aid to health profession students and their schools in the next three years, and provide facilities and programs to close the manpower shortages in the health professions within seven years.

AMA Chief Praises Press

The President of the American Medical Association, Wesley W. Hall, M. D., recently praised the nation's press for a "growing sophistication" in dealing with health care issues.

Speaking before an audience of newsmen, federal officials, and health organization representatives at the National Press Club in Washington, D. C., Doctor Hall said, "This is a most healthy development." Many news stories now analyze the issues raised and challenge and dispute assumptions rather than follow a "hackneyed theme," he said.

"If the people are fully informed, we doctors of America will put our trust in their ability to make the right decisions . . . I find it encouraging that the press is approaching this subject with maturity, with skepticism and, most of all, with an open mind," Doctor Hall added.

Noting that the AMA's Medicredit bill has attracted over 150 sponsors, Doctor Hall said that while this doesn't mean Medicredit is going to be enacted, it does "mean that a substantial number of Congressmen and Senators agree with the principles that we used in drawing up a program and offering it to Congress."

Doctor Hall said Medicredit makes available to everyone under 65 a private program of complete medical and health care protection, covering both the ordinary and the catastrophic expenses of illness or accident, He explained:

"The protection can be a health insurance policy, membership in a prepayment plan or membership in a prepaid group practice. Each patient is left free to choose the kind of care he wants, and each physician is left free to practice as he wishes—alone or with other physicians."

The most important thing about Medicredit, said the AMA official, is that it maintains freedom for the patient as well as for the physicians.

"We believe that there is a lot of good in the present system. Two million Americans a day see their doctor, and although this probably is not all who should see a doctor, there is no reason to throw out the system that has this capacity. Rather we should build on it," Doctor Hall said.

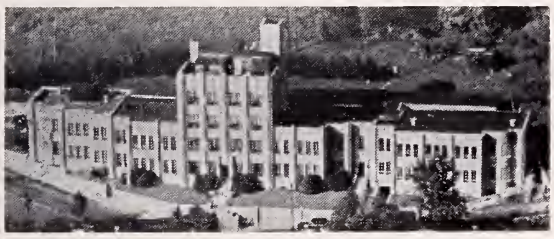
Cabinet Status for Health?

The AMA's often expressed desire to see the establishment of a separate Department of Health with Cabinet status has again been brought to the public's attention with the announcement of Congressman Paul G. Rogers, Florida Democrat and Chairman of the House's Subcommittee on Health, that he will shortly introduce such a measure.

The issue seems to turn on the intertwined questions of which committees in Congress have the job of enacting and overseeing a national program, and how the Federal Government will administer it.

During the past 10 years or so, health has mushroomed as an economic force in American life, and as a function of government. Neither Congress nor the executive branch has been able to keep pace organizationally with the changes.

Congressman Rogers' call for a separate health department is considered to be part and parcel of this behind-the-scenes jockeying by the Congress for more authority in health care matters. If a Department of Health was established, Rogers' Subcommittee could claim authority over all of the activities of the new department and drive to establish a permanent full committee on health.



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Annual Reports *

Committee on Presidential Address

The Chairman of the Board has today rendered his annual report to the stockholders. Allegorically speaking, this House of Delegates, just one year ago today, handed to George Callender the talents of responsibility in office. Today he has returned those talents together with the talents of leadership, administrative ability, dedication and sacrifice to the corporate stockholders, and like a good and faithful servant he has received the well-deserved thanks of his colleagues.

This annual report on the Presidential Address is really an unnecessary gesture provided by our Constitution and By-Laws. This audience has received his report, delivered in person, and the membership at large will find it in an early issue of *The Journal.*

Your Committee is impressed by the personal sacrifice and dedication to service evidenced by the report on presidential activities. His family and professional colleagues are indeed entitled to our thanks for the positive support which made his presidential load easier to bear.

Your Committee feels that each phase of presidential activity has a relative value to the entire picture, and therefore special reference to any one or several items in this report is not indicated. Each item in the presidential report can be likened to an individual stone in the wall of medical responsibility to those we serve.

Your Committee commends Doctor Callender for his concise yet comprehensive report and recommends adoption of the report by a standing vote. I so move.

Respectfully submitted,

James S. Klumpp, M.D.
Chairman

Aug. 21, 1971.

Committee on Aging

The 1970 report of the Committee on Aging was printed in the October, 1970, issue of the West Virginia State Medical Association *Journal.* The 1971 report is quite similar to last year's report. We still recommend to our Governor and the State Welfare Department that a booklet be prepared for distribution, listing all of the agencies and services which are available for the aged. This Committee favors a transportation service for the aged which would make it possible for them to get groceries, transportation to physicians' offices and get to a hospital or a clinic. A transportation stamp program similar to the Food Stamp Program would fill the vacuum which exists now for many elderly people.

A number of recommendations were made to the members of our profession. One was to charge reasonable fees for medical services. The most important one was that we should personally encourage our young medical students and graduates to see the opportunity and need for general practitioners in our state.

A stepped-up medical school training program was suggested last year by our Committee for the West Virginia University School of Medicine. As originally planned the medical school was set up to provide training for 60 graduates annually. According to the present plan, 76 students will receive their medical degrees in 1974. This appears to be the upper limit, with present facilities. Dr. Frank W. McKee, Dean of the School, states that an accelerated type of program would be of value only as a temporary measure.

The medical school has instituted a program for fourth-year students which should help to influence many of them to locate in West Virginia. The selective fourth year is divided into 12 four-week blocks. Six are to be spent at the Medical Center. Six may be spent at one or more of the eleven community hospitals participating in this program. Students will receive a minimum salary. The training will be supervised by licensed physicians and surgeons who are not especially oriented to medical school practice.

The crying need among the aging is the need for more general practitioners—family physicians who will see and care for sick patients. The sick aged patient needs a family physician who will make at least one home call before it is decided that the patient be hospitalized, sent to a clinic or treated at home. The present tendency seems to be to set up more clinics and haul in the patients. The elderly patient is often set in his ways and is prejudiced concerning hospitals and clinics. He would appreciate one friendly call from his family physician, and he should have a family physician.

Copies of last year's report of the Commission on Aging were sent to Gov. Arch A. Moore, Jr., and to Sen. Jennings Randolph. A copy of this report was printed in the Morgantown Post under the caption, "Twenty Million Senior Citizens Cannot Wait When They Need a Physician." Also, a partial copy of this report appeared in "Age for Action," the March-April, 1971, issue published by the West Virginia Commission on Aging. Governor Moore asked that a report be submitted to him if the State Medical Association took or takes any action on last year's report.

The members of the Committee on Aging were invited to attend one of the regional spring meetings of the State Commission on Aging. Two of us attended one of these meetings. One was attended by Dr. T. H. McGavack. Doctor McGavack recommends an accelerated program for general practitioners. The present program requires a minimum of three years of college work, four years in a medi-

*Other annual reports were published in the August 1971 issue of The Journal.

cal school and three years of residency training to be eligible for Board certification. West Virginia would welcome family physicians, even if not Board certified. Doctor McGavack's second most important recommendation referred to the training of paramedical personnel. This should include the training of more nurses, therapists and laboratory technicians, but not medical assistants.

The Chairman attended the Senior Citizens Conference on Aging at Jackson's Mill in May, and the Conference on Appalachian and Rural Health at Mont Chateau Lodge in June. A large number of outstanding speakers took part in this last program. They gave the impression that socialized medicine is just around the corner. Their main contribution toward the improvement of rural health was the setting up of numerous medical clinics. This could be a valuable step toward solving the rural health problem if it included adequate transportation.

At the Senior Citizens Conference at Jackson's Mill, Senator Randolph was the principal speaker. After he discussed the approach to socialized medicine, when medical and hospital care would be available for all Americans, he received a big round of applause. The medical profession should take heed to Frank Heaster's headline in the Morgantown Post: "Twenty Million Senior Citizens Cannot Wait." Socialized medicine, if and when it comes, will be deterred or accelerated by the actions of the medical profession and other related health care bodies. Good medical care for all Americans should be the goal of the medical profession, and that should include care for our senior citizens.

Respectfully submitted,

Eldon B. Tucker, M. D.
Chairman

Thomas B. Blake, M. D.
Myer Bogarad, M. D.
E. Lyle Gage, M. D.
Richard D. Hamilton, M. D.
Thomas H. McGavack, M. D.

July 27, 1971

Necrology Report

The following is a list of West Virginia physicians whose deaths have been reported to the West Virginia State Medical Association during the past year:

1970

July 29—Stanley John Skar ..... Elkins
Aug. 26—Clemmer Marcus Peck ..... Powellton
Aug. 29—John B. Banks ..... Charleston
Sept. 6—Don F. Shreve ..... White Sulphur Springs
Oct. 15—George W. West ..... St. Marys
Nov. 8—James DeVore Spencer ..... Mill Creek
Nov. 14—Joseph E. Chambers ..... Huntington
Nov. 14—Roy Russell Hagley ..... Huntington
Nov. 14—Herbert D. Proctor ..... Huntington
Nov. 15—William C. Stewart ..... Charleston
Nov. 29—Charles G. Morgan ..... Moundsville
Dec. 1—James F. VanPelt ..... Oak Hill
Dec. 4—Rex Dauphin ..... Parkersburg
Dec. 10—M. Lawrence White, Jr. ..... Huntington
Dec. 16—Edgar C. Blum ..... New Martinsville
Dec. 20—J. C. Gordon ..... Bluefield
Dec. 23—Charles E. Smith ..... Terra Alta

1971

Jan. 10—Eugene B. Wright ..... Clarksburg
Feb. 23—E. J. Haddad ..... Beckley
Mar. 1—Luther E. Rexrode ..... Marlinton
Mar 18—Edward W. Wood ..... Lake Worth, Fla.
Mar. 28—Joseph H. Selman ..... Charleston
Apr. 6—Dean F. Hill ..... Beaver
Apr. 10—Garnet Bradley ..... Hundred
Apr. 14—Edgar F. Heiskell, Jr. ..... Morgantown
Apr. 20—T. H. Millman ..... Rupert
May 1—John R. Godbey ..... Charleston
May 6—Isidore I. Hirschman ..... Huntington
May 11—O. Lake Huffman ..... Romney
May 24—James E. Spargo ..... Wheeling
June 17—Richard J. Stevens ..... Huntington
June 25—Merrill R. Fox ..... Washington, D. C.
July 19—William A. Thornhill, Jr. ..... Charleston
July 21—Leo M. Seltzer ..... Charleston
July 24—D. A. MacGregor ..... Wheeling
Aug. 2—W. D. Bourn ..... Barboursville
Aug. 3—A. B. Curry Ellison ..... Charleston

Respectfully submitted,

William H. Lively,
Executive Secretary

Report of Resolutions Committee

The Chairman of the Committee, Dr. Richard W. Corbitt of Parkersburg, submitted his report to the House of Delegates at the final session on Saturday afternoon, August 21, 1971. The report follows:

"Your Committee on Resolutions has carefully considered the resolutions offered before the first session of the House of Delegates on Wednesday afternoon, August 18, 1971.

"We are happy to report a number of interested physicians appeared at a meeting of the Committee held on Thursday afternoon, August 19, 1971, and discussed in detail the resolutions pending before the Committee.

"The cooperation of these physicians has been most helpful to the Committee in reaching decisions, and we express appreciation to those who took time to attend the open hearing.

"Mr. President, your Committee assures the members of the House of Delegates that the one and only consideration that has guided the Committee in its deliberations has been the criteria as to whether each of the resolutions were or would be to the best interests of the entire medical profession in West Virginia.

"Mr. President, we wish to thank the members of the West Virginia State Medical Association who appeared before the Committee at the open hearing on August 19, 1971.

"Your Chairman personally expresses his gratitude to the members of the Committee for the pat-

ience, enthusiasm, wisdom and valuable time devoted to the study of the resolutions.

"In addition to your Chairman, the members of the Committee participating were Drs. Albert C. Esposito of Huntington, Richard E. Flood of Weirton, A. Thomas McCoy and Seigle W. Parks of Charleston; and Mr. William H. Lively, *Secretary Ex Officio.*"

Resolutions

Resolutions offered at the first session of the House of Delegates on Wednesday afternoon, August 18, 1971, were referred to the Committee on Resolutions for study and report back with recommendations at the final session on Saturday afternoon, August 21.

Dr. Richard W. Corbitt of Parkersburg, the Chairman, presided at a meeting of the Committee on Thursday afternoon, August 19.

The Committee voted to recommend to the House that both resolutions included in this report be adopted; however, the Committee recommended that resolution two be amended in the following manner: In line two of the first resolve, by deleting the word, "department," and substituting therefor the word, "program."

The proposed amendment was defeated by the House of Delegates on Saturday afternoon.

The House of Delegates adopted the following resolutions as originally introduced:

Resolution No. 2—Department of Family Practice at the WVU School of Medicine—By the Kanawha Medical Society.

WHEREAS, There is a need for a greater number of physicians in family practice, and

WHEREAS, The population of the State of West Virginia would particularly benefit from the training of family physicians in the West Virginia University School of Medicine,

THEREFORE, BE IT RESOLVED, That the West Virginia State Medical Association, meeting in convention August, 1971, does hereby endorse the formation of a Department of Family Practice at the West Virginia University School of Medicine, and

BE IT FURTHER RESOLVED, That this Department of Family Practice be instituted no later than the fall semester of 1972-1973, with stature and standing equal to the other departments in the School of Medicine.

Resolution No. 1—Implementation of the Medical Examiner System—By the Kanawha Medical Society.

WHEREAS, In 1963 the West Virginia Legislature enacted legislation establishing the office of Medical Examiner for the State of West Virginia. Unfortunately, funds provided four years later were not sufficient to permit the employment of a qualified Chief Medical Examiner nor for the establishment and staffing of such an office. Since this initial effort, no additional financing has been forthcoming and the act remains on the books unfunded, and

WHEREAS, During the past year a number of citizens in the State have been found dead under unusual circumstances pointing up the need for the services of the office, and

WHEREAS, It is an unfortunate situation that such deaths are reported and arrangements made for burial, without having the advantage of expert and qualified opinions presented as to the actual cause of death, and

WHEREAS, The primary function of the system is to furnish medical information to courts, about 50 per cent of medical examiner cases being associated with crimes, and

WHEREAS, These medical examinations are highly valuable in many situations such as settlement of estates, insurance claims, etc., and

WHEREAS, The system will provide families of deceased persons with some satisfactory explanation of cause of death rather than have a great number of death certificates read "heart attack," and

WHEREAS, West Virginia has enacted an excellent law, rated by authorities in this field as one of the best in the nation,

THEREFORE, BE IT RESOLVED, That the West Virginia State Medical Association, and all of its component medical societies, go on record in support of adequate financing of the office of State Medical Examiner and the employment of such personnel as needed to carry out the full provisions of the act under the laws of the State of West Virginia, and

BE IT FURTHER RESOLVED, That each delegate to this convention agree to help initiate action by his local society to contact the State Senators from his district and the members of the House of Delegates from his county in regard to this matter.

Psychological Dependence Tied To Drug Addiction

Drug addicts may be able to learn how to reduce the time of their withdrawal symptoms when they decide to kick their habit, if the findings in a series of experiments at the University of Rhode Island can be applied to humans, according to the National Society for Medical Research.

Doctoral candidates Mark Roffman and Chejerla Reddy, and Dr. Harbans Lal, Professor of Pharmacology, have reported studies with morphine addicted rats which have shown that drug addiction may be more of a psychological dependence problem than previously thought.

The three men taught morphine addicted rats to associate injections of morphine sulfate with the ringing of a bell 30 seconds before and after receiving their shots.

The rats were taken off morphine and separated into two groups—one group receiving a saline solution injection along with the bell, while the control group enjoyed no treatment and had to undergo withdrawal as a human would.

Rats receiving the bell saline treatment showed no withdrawal symptoms until that treatment was stopped.

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Obituaries

JOSEPH KRIMSKY, M.D.

Dr. Joseph Krimsky, who headed the eye, ear, nose and throat clinic at the Veterans Administration Hospital in Huntington from 1933 until his retirement in 1963, died July 31 in Daytona, Florida. He was 88.

A native of Kiev, Russia, Doctor Krimsky was a graduate of New York University and the Bellevue Hospital Medical College in New York City. He was a former member of the Cabell County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Book Reviews

RHYMES OF A RESTLESS MAN—By Everett Lyle Gage, M. D. First Edition, 1970. Vantage Press, Inc., 120 West 31st Street, New York, N. Y. 10001.

A short time ago, a slender volume of verse was placed in our hands. To our amazement, from the jacket cover smiled an old friend and colleague, one who serves with us on the Editorial Board of this Journal—Everett Lyle Gage, M. D., practicing physician of Bluefield, West Virginia.

The title of the book is "Rhymes Of A Restless Man," but as the jacket declares it might be better entitled "Exercises for a Restless Mind," for it depicts a mind interested in a wide diversity of topics: religion, sex, war, medicine, irreverence, children, beauty, politics, human courage in illness, and the future.

In inimitable style, he shares with us his emotion at times of crisis, his pleasure in his family and friends and the joys of everyday living.

Do yourself a favor, read this and get better acquainted with this remarkable fellow.—George F. Evans, M. D.

Medical Technologists' Tests In Charleston Nov. 13

Certification examinations of medical laboratory personnel will be offered by American Medical Technologists, a national, non-profit registry, November 13 in Charleston.

AMT, founded in 1939 as an independent, member-owned professional organization, has a membership in excess of 10,500 located in every state of the country. The registry assists clinical laboratory personnel in their individual efforts to increase their level of professional competence toward the ultimate goal of the best possible health care for the general public.

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County Societies

CABELL

Dr. Theodore Niedengard of St. Vincent's Hospital in New York City spoke on "Illegal Drug Use" at a Thursday, September 9, meeting of the Cabell County Medical Society at the Frederick Hotel in Huntington.

About 60 members of the Cabell County Bar Association were guests of the Medical Society, and representatives of the United Fund spoke on behalf of that annual campaign.

Drs. Robert W. Lowe, James R. Cook and Joseph B. Touma were elected unanimously to membership in the Society. Dr. Charles McKown introduced Doctor Niedengard.—G. E. Vanston, M. D., Secretary.

* * * *

KANAWHA

The Kanawha Medical Society resumed its schedule of regular meetings on Tuesday, September 14, at the Daniel Boone Hotel in Charleston with Dr. Frank W. McKee, Dean of West Virginia University's School of Medicine, as the speaker.

Doctor McKee's topic was "Paradoxes in Medical Education and Practice." The Kanawha Society also was told of appointment of a Physicians' Advisory Committee for Mental Health to study and offer advice in activities aimed at drug abuse.—George W. Hogshead, M. D., Secretary.

* * * *

HARRISON

The Harrison County Medical Society held its first 1971-72 meeting on Thursday, September 9, at Clarksburg's Stonewall Jackson Hotel with Dr. Harry S. Weeks, Jr., of Wheeling, President of the West Virginia State Medical Association, as its speaker.

Doctor Weeks discussed the status and activities of the medical profession at national, state and county levels. Dr. and Mrs. Charles S. Harrison of Clarksburg held a reception in honor of Doctor and Mrs. Weeks after the meeting, attended by 40 Society members and 35 guests.—Robert D. Hess, M. D., Secretary.

Cancer, Longevity Linked to Diet

A longer life span and a reduced chance of developing cancer in laboratory animals have been attributed to a reduced food intake by a California scientist, according to the National Society for Medical Research.

Dr. Roy L. Walford of the University of California at Los Angeles School of Medicine says evidence obtained in his laboratory suggests that these effects of the animals' diets are related to changes in their immunologic systems.

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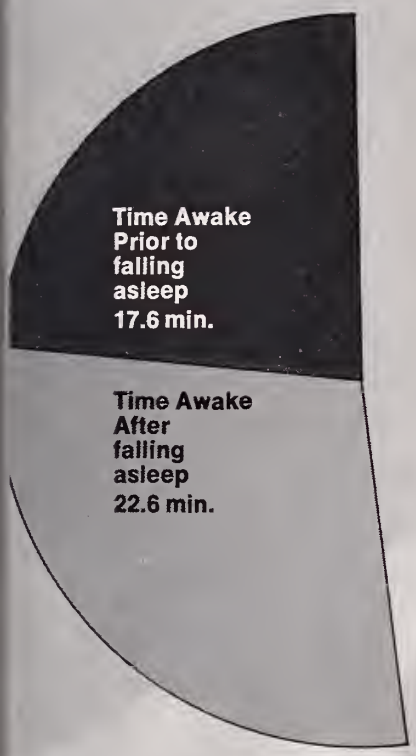

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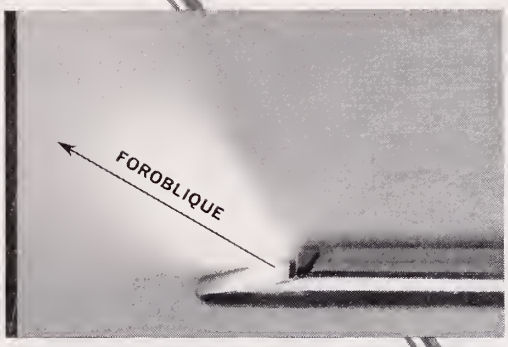

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WVU Medical Center
–News–

In recent months, the West Virginia University School of Medicine has welcomed the following faculty members to its various departments and divisions:

Dr. Albert J. Azzaro, Assistant Professor of Neurology and Pharmacology; Dr. John R. Bowers, Assistant Professor of Anesthesiology; Dr. Stephen W. Carmichael, Instructor of Anatomy; Dr. Estelle Connolly, Assistant Professor of Surgery (Otolaryngology); Dr. Hilary Evans, Assistant Professor of Pathology; Dr. Albert H. Gelderman, Associate Professor of Pathology.

Nicholas Hahon, Assistant Professor of Pediatrics and Instructor of Microbiology; Dr. El-Sayed H. Hegab, Associate Professor of Anesthesiology; Dr. Peter L. Hein, Jr., Professor of Psychiatry; Dr. Ernest F. Hyde, Clinical Assistant Professor of Medicine (Hematology); Dr. John T. McFarlane, Assistant Professor of Anesthesiology; Dr. Michael G. Mawhinney, Assistant Professor of Pharmacology and Urology.

Dr. Phillip R. Miles, Assistant Professor of Physiology and Biophysics; Dr. Edwin J. Morgan, Assistant Professor of Medicine; Dr. Dennis O. Overman, Instructor of Anatomy; John J. Petronis, Instructor of Physical Therapy; Dr. Santo Pullella, Instructor of Physiology and Biophysics; Dr. Joseph J. Renn, Assistant Professor of Medicine.

Dr. Chang Nam Rhiew, Instructor of Radiology; Dr. Joe W. Rhudy, Assistant Professor of Medicine; Dr. Ildefonso Rodis, Instructor of Anesthesiology; Dr. David J. Smith, Assistant Research Professor of Anesthesiology; Dr. William B. Svoboda, Assistant Professor of Neurology and Pediatrics.

- **Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.**

Dr. Yet-Sim Tan, Instructor of Physiology and Biophysics; Dr. Erdogan Tercan, Assistant Professor of Anesthesiology; Dr. Leonardo Ventura, Instructor of Anesthesiology; Dr. Robert Walat, Instructor of Pathlogy; and Henry E. Wurtz, Instructor of Anesthesiology.

Doctor Chou Honored

"Totally unexpected" is the way Dr. Shi-Ming Samuel Chou describes the honor that came to him at the recent 47th Annual Meeting of the American Association of Neuropathologists, in San Juan, Puerto Rico.

Of 120 presentations at the meeting, Doctor Chou's was judged the best clinically oriented research paper, and won for him at the organization's banquet the first Matthew T. Moore Award ever given.

In his paper titled "Subacute Focal Adenovirus Encephalitis," Dr. Chou details a disease never described before.

The Medical Center Professor of Pathology, Neurology and Neurosurgery has long had an interest in virus-caused diseases. But, he says, "To find a new disease is never easy."

The thorough investigation that led to presentation in Puerto Rico of his original findings took one and a half years and involved such steps as tissue freezing—to isolate the virus; fixing the tissue for electron microscope studies; gross examination of the tissue; and light microscope and fluorescent antibody studies.

Dr. Frank W. McKee (left) and Dr. David Z. Morgan, Dean and Assistant Dean, respectively, of West Virginia University's School of Medicine, pose in the left photo with the School's exhibit at the West Virginia State Medical Association's Annual Meeting at The Greenbrier in August. In the right photo, Doctor McKee (left) chats with Dr. Charles E. Andrews, Provost of Health Sciences at the WVU Medical Center, and Dr. C. Richard Daniel of Beckley.

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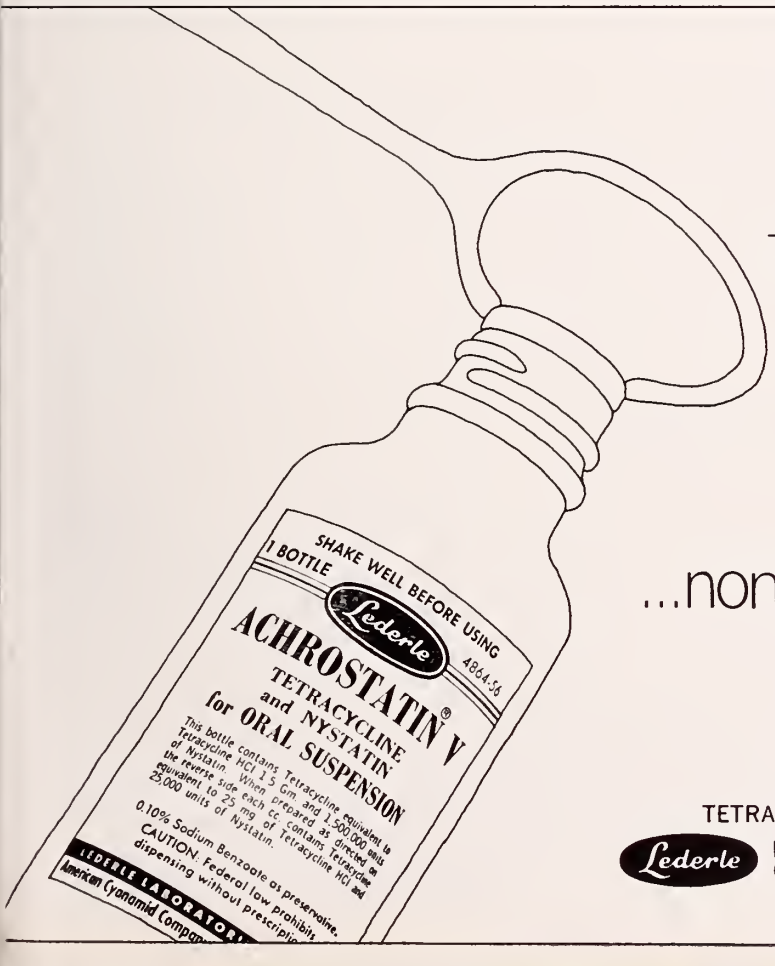

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The Month in Washington

• From the Washington Office of the American Medical Association.

HEALTH, Education and Welfare Secretary Elliot L. Richardson has approved a proposed regulation to authorize insurance carriers to issue contracts for prepaid group medical service to persons in any state regardless of any restrictive state law.

Authority for the proposed regulation was granted by Congress last year in a law sponsored by Sen. Edward M. Kennedy, Democrat of Massachusetts, who also is the chief Congressional sponsor of organized labor's all-out national health insurance proposal. Under the terms of the law, the Secretary of HEW can authorize insurance carriers who provide coverage through the Federal Employee Health Benefits Program to issue contracts for the group medical services.

Forty-one prime health insurance carriers presently provide coverage through FEHBP. The actual number of insurance carriers affected by the law could total in the hundreds because of reinsurance contracts between prime carriers and other insurance providers, according to a spokesman for the Department's Office of Group Practice Developments.

The regulation allows the HEW Secretary to authorize the insurance companies "to issue in any state contracts entitling any person as a beneficiary to receive comprehensive medical services from a group practice unit or organization" with which the company has contracted for the provision of group services.

The proposed regulation would be to override those restrictions, "enabling insurance carriers to issue contracts for prepaid group medical services to any individual in any state," a HEW announcement said.

HEW said as many as 50 million residents of the 20 states with laws restricting group practice could become eligible for group health plans.

Such plans, as described in the proposed rules, offer preventive, diagnostic and therapeutic medical services in a single organization on a prepaid basis.

"A medical group . . . shall include at least a general practitioner and representatives of each of the following medical specialties: general surgery, obstetrics, internal medicine, pediatrics and ear-nose-throat," the proposal said.

Senator Kennedy applauded HEW's move, but criticized the delay.

"The cause of the delay is no secret," he said in a statement. "For months, the profitmaking commercial industry fought to obtain a larger role."

He said that while the intent of Congress prevailed, the delay shows "the virtual stranglehold the health insurance lobby has on this administration."

Separate Cancer Agency Opposed

The American Medical Association told Congress that the attack on cancer can be most effectively conducted through the National Cancer Institute within the National Institutes of Health, rather than through a separate and autonomous agency.

Testifying before the House Health and Environment Subcommittee, Franz J. Ingelfinger, M. D.. editor of the New England Journal of Medicine and a member of the Advisory Committee on Medical Sciences to the AMA's Board of Trustees, said that "the effort to cure cancer will have to be a coordinated effort with full involvement of all the national institutes (of health)."

"There is another compelling reason to retain the cancer program within NIH, and that is to keep the NIH intact rather than have it become fragmented into independent agencies," Doctor Ingelfinger said. "Under the latter conditions, the agencies would be competing for support and recognition rather than collaborating for scientific progress. The NIH is generally regarded in the international scientific community as one of the most splendid scientific achievements of the 20th century. To impair the effectiveness of this productive organization would be unwise. The integrity of the NIH should be maintained and increased support provided."

Doctor Ingelfinger expressed opposition to a compromise measure passed by the Senate which would create a new independent Conquest of Cancer Agency within the NIH. He said that the autonomy proposed for such a new agency would "threaten the structure of the National Institutes of Health and impair research efforts in all fields."

Doctor Ingelfinger cautioned against expecting any quick victory over cancer.

"We believe . . . that false hopes should not be created and that people should not be led to believe that with enough money and enough effort cancer will quickly be conquered," Dr. Ingelfinger said.

Radiology:
Karl J. Myers, M. D.

Pathology:
Fulvio Franyutti, M. D.

Surgery:
Hu C. Myers, M. D.
A. Kyle Bush, M. D.
T. H. Chang, M. D.

Gynecology and Obstetrics:
Raymond W. Cronlund, M. D.

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E. G. Guy, M. D.
Y. J. Song, M. D.

Pediatrics:
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E. G. Kreider, M. D.

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Dentistry:
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Obituaries

JAMES M. SCOTT, M.D.

Dr. James M. Scott, 55, of Madison died of an apparent heart attack October 5. A native of Pearisburg, Virginia, he had practiced in Madison since 1949.

Doctor Scott received his undergraduate and medical degrees from George Washington University in Washington, D.C. He interned at Sibley Memorial Hospital in Washington, and served a residency at Bellevue Hospital in New York City in 1946 and 1947.

A veteran of more than three years of U.S. Army service, Doctor Scott was a member of the Boone County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Survivors include his widow; a son, James M. Scott, Jr. of Madison; two daughters, Mrs. Lynda Bass of Nuremberg, Germany and Ruth, at home; and a brother, Sidney Scott, Jr., of Buchanan, Virginia.

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FERDINAND M. VISCUSE, M. D.

Dr. Ferdinand M. Viscuse of Logan was dead on arrival at a Logan Hospital on September 23 after an apparent heart attack. He was 61, and had practiced in Logan since 1953.

A native of Jamaica, New York, Doctor Viscuse received his undergraduate degree from New York University, and his medical degree from the Marquette University School of Medicine in Milwaukee, Wisconsin.

He interned at St. Mary's Hospital in Milwaukee, and also took postgraduate work in internal medicine at Veterans Administration hospitals, specializing in heart disease.

Doctor Viscuse was a veteran of World War II service with the U. S. Army, serving as a public health officer and battalion surgeon, and holding the rank of Captain. He was a member of the Logan County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Doctor Viscuse is survived by his widow; a son, F. Michael, Jr., and a daughter, Mary Teresa, both at home; his mother, Mrs. Mary Scibelli Viscuse of Long Island, New York, and three brothers.

AMA Approves Federal Aid For Doctor-Short Areas

The American Medical Association has outlined its support for legislation that would provide federal aid to individual or small groups of physicians in establishing medical practices in rural areas, small towns and low income inner-city areas.

The legislation (S. 2269) would amend the National Housing Act to authorize mortgage insurance for the construction and rehabilitation of medical facilities for the practice of one to four physicians in physician-shortage areas. In 1966, mortgage insurance was authorized for establishment of nonprofit group practices. The current legislation would extend that program.

STATEMENT REQUIRED BY THE ACT OF OCTOBER 23, 1962; SECTION 4369, TITLE 39, UNITED STATES CODE SHOWING THE OWNERSHIP, MANAGEMENT AND CIRCULATION OF THE WEST VIRGINIA MEDICAL JOURNAL. The West Virginia Medical Journal is published monthly at 1526 Charleston National Plaza, Charleston, West Virginia 25301.

The names and addresses of the publisher, editor and managing editor are: Publisher, the West Virginia State Medical Association, Box 1031, Charleston, W. Va. 25324; Editor, George F. Evans, M. D., 122 South Sixth Street, Clarksburg, W. Va. 26301; and Managing Editor, Mr. William H. Lively, Box 1031, Charleston, W. Va. 25324.

The known bond holders, mortgages, and other security holders owning or holding one per cent or more of total amount of bonds, mortgages or other securities are: None.

The average number of copies each issue during preceding twelve months are: (A) Total number of copies printed: 2,500; (B 1) Paid circulation through dealers and carriers, street vendors and counter sales: None; (B 2) Paid circulation through mail subscriptions: 1,936, (C) Total paid circulation: 1,936, (D) Free distribution by mail, carrier, or other means: 127; (D 2) Copies distributed to news agents, but not sold: None; (E) Total distribution: 2,063, (F) Office use, left-over, unaccounted, spoiled after printing: 439; and (G) Total: 2,500.

I certify that the statements made by me above are correct and complete.

(Signed) William H. Lively,
Managing Editor

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County Societies

RALEIGH

Dr. Daniel Hamaty, Charleston Rheumatologist, addressed the Raleigh County Medical Society's September 16 meeting at Henry's Restaurant in Beckley. Doctor Hamaty's presentation covered non-articular rheumatism, fibrositis and bursitis.—James A. Gardner, M. D., Secretary.

Continuing Education Programs Listed by MCV Department

A variety of programs are planned by the Department of Continuing Education, School of Medicine, Medical College of Virginia, Virginia Commonwealth University, in Richmond for coming months.

The list of courses include:

December 2-3, Forty-Third Annual McGuire Lecture Series—"Advances in Reproduction"; sponsored by the Departments of Obstetrics and Gynecology and Continuing Education, to be held in Baruch Auditorium, Medical College of Virginia.

December 3, Ware Residence Program—postgraduate course in Obstetrics and Gynecology; to be held at the Medical College of Virginia.

February 25-26, 1972: Twenty-Fifth Annual Stoneburner Lecture Series—"What is New in Anesthesiology"; sponsored by the Departments of Anesthesiology and Continuing Education, to be held in Baruch Auditorium, Medical College of Virginia.

March 3, 1972: Law Institute on Hospitals and Medicine; sponsored by the Department of Legal Medicine; to be held in the Richmond Academy of Medicine Auditorium.

March 6-9, 1972: The Alton D. Brashear Postgraduate Course in Head and Neck Anatomy; sponsored by the Department of Anatomy, to be held at the Medical College of Virginia.

Further information may be obtained from Miss Erma Blanchard, Secretary, Department of Continuing Medical Education, School of Medicine, Medical College of Virginia, Health Sciences Center, Richmond, Virginia 23219.

Doctor Blaydes Gives Paper

Dr. J. Elliott Blaydes, Jr., of Bluefield spoke on the use of collagen sutures and cataract surgery at the Annual Meeting of the American Academy of Ophthalmology and Otolaryngology in Las Vegas, Nevada, late in September.

Woman's Auxiliary

to the

WEST VIRGINIA STATE MEDICAL ASSOCIATION

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President Elect: Mrs. Robert G. Janes, Fairmont
Vice President: Mrs. Richard G. Starr, Beckley
Eastern Regional Director: Mrs. Frank J. Gavlas, Martinsburg
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Corresponding Secretary: Mrs. Gary C. Gilbert, Huntington
Parliamentarian: Mrs. Robert R. Pittman, Martinsburg

EASTERN PANHANDLE

Wives of physicians at the Baker Veterans Administration Hospital in Martinsburg met with the Woman's Auxiliary to the Eastern Panhandle Medical Society for the first time with social membership affiliation at a September session in the home of Mrs. Frank Hamilton, Martinsburg.

Mrs. William L. Rodgers, of Martinsburg, President of the Auxiliary, reviewed the group's performance in such projects as assistance with a heart clinic; continued service with a tuberculosis control mobile unit; help with the "meals on wheels" program; support for a family planning clinic, and assistance for a health career program for junior high school students.—Mrs. Norman Samuels, Secretary.

* * * *

KANAWHA

The Woman's Auxiliary to the Kanawha Medical Society agreed at a September 14 meeting to place special emphasis on how best to tell young people the story of opportunities in health careers.

The meeting was held at the home of Dr. and Mrs. W. L. Cooke. Mrs. J. L. Mangus, Chairman of the Auxiliary's Health Careers Committee, reported on plans for a January 11, 1972, joint meeting of medical, dental and pharmaceutical auxiliaries to explain ways in which health career information can be disseminated.

The Medical Auxiliary again will support the hearing testing program offered in public schools under supervision of school nurses; will collect and repair clothing at the school clothing center, and will continue to make cancer dressings for delivery to the Kanawha County unit of the American Cancer Society.—Mrs. Carlos Boetsch, Press and Publicity Chairman.

* * * *

HARRISON

The Woman's Auxiliary to the Harrison County Medical Society began a new year of activities September 16 with its annual membership tea at the home of Dr. and Mrs. Joseph Gilman in Clarksburg.

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Stephen T. J. Lee, M. D.
James A. Gordner, M. D.

Orthopedics
Clifford A. Stevenson, M. D.
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R. G. D. Concepcion, M. D.

Ear, Nose & Throat
P. C. Corro, M. D.

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Mrs. Robert D. Hess of Bridgeport, the Auxiliary's President, introduced Mrs. Robert G. Janes of Fairmont, President Elect of the Woman's Auxiliary to the West Virginia State Medical Association. Mrs. Janes urged Auxiliary members to become better informed with regard to legislation related to public health and the medical profession.—Mrs. John D. H. Wilson, Secretary.

* * * *

RALEIGH

The Auxiliary to the Raleigh County Medical Society discussed ways of making its programs more effective at a September 21 meeting in the home of its President, Mrs. C. Richard Daniel, in Beckley. Thirty members were present.

Various committee chairmen outlined plans for the new Auxiliary year, and specific topics for review included efforts to create more interest among members in legislation affecting public health.—Mrs. John A. McKenzie, Press and Publicity Chairman.

State Birth Rate Rises

West Virginia's birth rate, which dropped from 21.2 per 1,000 population in 1960 to 16.4 in 1969, rose again to a 17.3 figure in 1970 the State Department of Health has reported. Meanwhile, the Department attributes a crude death increase from 9.7 per 1,000 population in 1960 to 11.4 in 1970 to the aging trend in the State.

Book Reviews

Review of Medical Physiology, 5th Edition. By William F. Ganong, M. D. Price $8.50. Pp. 573. Lange Medical Publications, Los Altos, California, 1971.

This volume is recommended for your consideration. It will be valuable to those reviewing for examinations, those dealing with various cases of disturbed physiology, and those who haven't touched a physiology text for 20 years. The publisher's paperback series is well known. The author is to be complimented on keeping the text concise and appropriate.

The illustrations and diagrams are adequate. The section on nervous system physiology is well done and includes the more recent advances on such items as the basis of memory and its inhibiting mechanisms. We dislike seeing a discussion on respirators start out with the drinker, when information on the more commonly used gadgetry needs to be disseminated. Greater emphasis on physiology of the aging process would be beneficial in all such texts.

The overall quality and quantity is excellent. A good text at a reasonable price speaks for itself.—Harry S. Weeks, Jr., M. D.

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REVIEW OF PHYSIOLOGICAL CHEMISTRY—By Harold A. Harper, M. D. Lange Medical Publications, Los Altos, California. 1939. 13th Edition. Pg. 525. Price: $8.00.

This is the 13th edition of this "Review of Physiological Chemistry," which was originally published in 1939, and has been published in six foreign languages.

This book of 525 pages is divided into 22 chapters and an appendix with reference to general and physical chemistry, and organic chemistry. There is a comprehensive index.

The author states the "accumulation of knowledge continues to pose the difficult problem of giving adequate attention to recent discoveries, while still serving the original purpose of the Review as a more concise source of information than standard textbooks."

The text is a concise reference that should be of use to many physicians, particularly so, to those preparing for basic science examinations.—George F. Evans, M. D.

Bronchitis, Emphysema, Asthma

Bronchitis, emphysema and asthma make up the 10th leading cause of death nationally. In West Virginia, the State Health Departmnet reports, they rank sixth. Diseases of the heart are No. 1 nationally and in the state.

Military Medical School Opposed by AMA

A proposal calling for establishment of a military medical school has drawn opposition from the American Medical Association.

In recent testimony before the House Armed Services Committee, Bland W. Cannon, M. D., a member of the AMA's Council of Medical Education, said:

". . . We cannot emphasize too strongly that our concern is that the men and women in our uniformed services should receive nothing less than the best in medical care. There is no reason why they should not continue to receive care from physicians trained in a medical education system which has proven itself to be unexcelled. We support an expansion and greater utilization of this system, rather than the development of a new and different kind of institution. . . .

"One aspect of the nation's goals for more physicians is the need of the uniformed services, and it is to this one aspect that H.R. 2 is directed. The AMA believes it is vital that the number of physicians in the uniformed services be adequate to enable them to carry out their missions, and that those physicians be thoroughly trained and competent in order that those serving our country in the uniformed services might receive the best possible medical care.

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Technologists:
Electrocordiography:
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Electroencephalography:
Joann Green, R. N.
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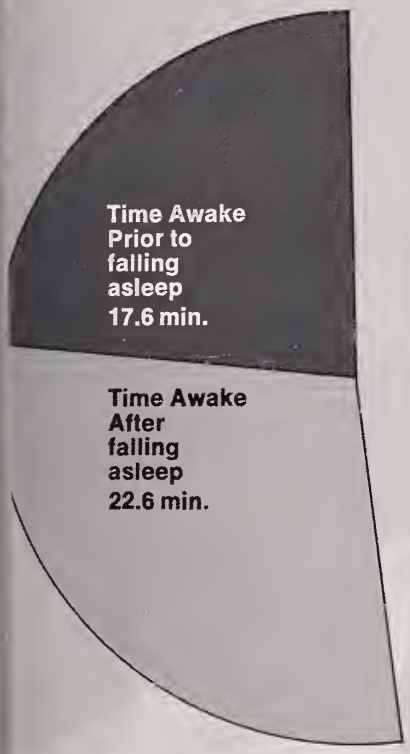

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1971

Vol. 67 No. 12

The WEST VIRGINIA Medical Journal

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WVU Medical Center
–News–

• **Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.**

EVAN S. POKORNEY of Wheeling has become the first recipient of the $250 scholarship that an anonymous donor recently established at the West Virginia University School of Medicine in the name of Dr. and Mrs. Milford L. Hobbs.

The award, to be given annually to the "student entering the junior class who had the best evaluation by the faculty in pathology," was presented by Dean Frank McKee at the School of Medicine's recent Fall Convocation.

Doctor Hobbs served from 1947 to 1961 as Professor and Chairman of the School of Medicine's Department of Pathology, and was a member of the Planning Committee for the Medical Center. He and Mrs. Hobbs reside in Augusta, Georgia, where he is a member of the Veterans Administration Hospital staff.

This is the second honor received this year by Pokorney. Last spring at the medical school's honors convocation, he won the Roche Award given annually to the student with the highest academic average in the second-year class. He is the son of Mr. and Mrs. Sidney Pokorney of 39 Alice Avenue, Wheeling.

New Role for Doctor Nolan

Dr. Robert L. Nolan, Chairman and Professor of Public Health and Preventive Medicine at West Virginia University, has been appointed to the National Advisory Council on Health Manpower Shortage Areas.

The 15-member Council, which was appointed by the U. S. Secretary for Health, Education and Welfare, will help establish guidelines and regulations to implement the Emergency Health Personnel Act of 1970.

Doctors, dentists, pharmacists, nurses and other health personnel will be assigned to rural and urban areas with serious health manpower shortages under the act. The health teams will form the National Health Service Corps, which will be part of the U. S. Public Health Service.

State and local health agencies and all non-profit health groups may apply for needed health personnel to be assigned to their areas. Matching funds aren't required. However, the area must be designated by the HEW Secretary as having a critical shortage of health manpower and this need must be certified by local and state governments and by local and state health professional societies.

The National Advisory Council will make recommendations to the HEW Secretary about which areas need more health manpower and on the selection of Public Health Service personnel for these assignments.

Annual Alumni Reunion

Graduates of WVU's School of Medicine returned to Morgantown Friday, October 22, for their second annual Alumni Weekend. Joining them in activities at Lakeview Inn and Country Club, and at Mont Chateau, were local alumni, including those in residency programs and on the School of Medicine faculty.

Members of the Class of 1926 arranged their 45th reunion to coincide with other Alumni Association events. That class has staged a get-together every five years since graduation.

The weekend's scientific program again featured Dr. Wilford W. Spradlin, School of Medicine Professor and Chairman of Behavioral Medicine and Psychiatry, with his subject "Sexual Problems in Medical Practice."

Coordinating events for the Class of 1926 were Drs. Cyrus H. Maxwell and Ralph Knutti of Bethesda, Maryland. Among those registered for the reunion were Dr. and Mrs. Ramon Maldonado Quinones of Hato Rey, Puerto Rico. Doctor Quinones was looking forward to his first reunion with his classmates of 45 years ago.

Comparing notes as they prepared to lead small group workshops during "Diagnostic and Therapeutic Approach to Cardiac Arrhythmias" program at West Virginia University Medical Center in October were (from left) Dr. Ross Fletcher, Chief of Cardiology at District of Columbia General Hospital, Washington, D. C.; Dr. Henry J. L. Marriott, Clinical Professor at Emory University School of Medicine, Atlanta, Georgia and Director of Clinical Research for the Rogers Heart Foundation; and WVU School of Medicine faculty members Drs. Edward K. Chung, Donald K. Chung and Lowell T. Mouser. The American College of Cardiology and the WVU School of Medicine presented the sessions, which attracted 56 physicians from 16 states.

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The Month in Washington

• **From the Washington Office of the American Medical Association.**

THE long awaited public hearings on the various proposals for national health insurance before the House Ways and Means Committee are now underway. Some 200 organizations and individuals are expected to testify during the scheduled six weeks of hearings.

Lead off witness was HEW Secretary Elliot Richardson who revealed an entirely new proposal "to tighten controls on provider costs and inefficiencies."

The Secretary also outlined the long-awaited program for regulating private health insurance companies. In the 38-page statement, Richardson was highly critical of the Kennedy-Labor Bill.

Richardson said the provider controls and the insurance company plan will be submitted in legislative detail to the Committee shortly. Following is a summary of the Administration's text on the provider plan:

"In order to help the consumer become a prudent buyer in the medical care market and to protect the consumer against unnecessary increases in health care costs, we shall propose the following provisions:"

...The states shall require health insurance companies to inform prospective policyholders as to benefits, exclusions, premium costs and delivery system choices.

...The states shall require providers to inform the public as to charges for standard items and other patient access matters.

...We will establish on an experimental basis local quality review organizations composed of outside medical experts, including non-providers in some instances.

...We also propose to require NHISA carriers to apply control measures and statistical reporting measures in accordance with Federal guidelines, such as strict review of utilization of health care services. Specific plans for implementation with regard to wages and prices will be developed in conjunction with the Committee on the Health Industry established by the President under Phase II of his new economic policy.

...State planning agencies will be required in cooperation with area-wide planning agencies and as a condition of Federal grant support and approval, to identify geographic areas of physician and facility oversupply. States are to develop and apply detailed criteria based on Federal guidelines, and publish this information.

Under the proposed insurance company regulations, Richardson said:

"We intend to secure agreements with states under which the states will

...Require annual, independent audits of participating insurance companies.

...Create state health insurance insolvency mechanisms. A Federal mechanism will also be established for use if a state fails to act satisfactorily.

..."File and use" procedures for premium rates under NHISA insurance contracts, with authority to disapprove extraordinary rates.

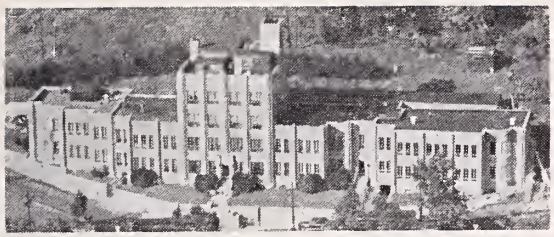
...Require disclosure by insurers of their administrative expenses as a percentage of premiums.

...Create state insurance pools, on a state-wide or sub-state basis open to small employers, the self-employed, and those who are not employed, but are ineligible for Federally-financed health programs."

Richardson said he was certain the hearings "will culminate in a national health insurance program." The Administration's plan avoids the danger of two extremes—proposals that do little to alter the present system and proposals to substitute a monolithic Federal scheme, he declared. Richardson said proponents of the Kennedy-Labor Bill "seem to assume that radical intervention by the Federal Government in health care, in an inflexible, predetermined and monolithic manner, is the only way to solve health organization and delivery problems. I suggest that we are more likely to attain our common health objectives by stimulating competition and by promoting consumer education and freedom of individual choice, rather than by resorting to fiscal coercion and unrealistically global schemes." He estimated it will cost $60 billion in new taxes.

The American Medical Association's Medicredit and the Health Insurance Association of America's plan also were criticized. The major shortcoming in both, said Richardson, "is the great unlikelihood of achieving universality in protection."

The catastrophic protection plans, standing alone, "do very little for very few people—far less than what this nation must do if it is to act with a full sense of responsibility," the HEW Secretary testified.



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Obituaries

BAMBRAN A. ADYANTHAYA, M. D.

Dr. Bambran A. Adyanthaya, a Hinton orthopedic surgeon, died October 17 in an automobile accident near Hinton. He was 32.

A native of Mangalone, India, he had an undergraduate degree from Layola College and his medical degree from Stanley Medical College, both in the Indian state of Madras.

Doctor Adyanthaya, who was single, interned at Sinai Hospital in Baltimore, Maryland, and served a residency at the University of Pennsylvania.

He also did postgraduate work at the University of Pennsylvania; was a clinical and teaching Fellow at Children's Hospital in Philadelphia, and received further training at the Institute of Orthopedics and the Robert Jones and Agnes Hunt Orthopedic Hospital in Oswestry, England.

Doctor Adyanthaya was a member of the Summers County Medical Society, the West Virginia State Medical Association and the American Medical Association.

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JAMES E. BLAYDES, M.D.

Dr. James E. Blaydes, an eye, ear, nose and throat specialist who had practiced in Bluefield for 50 years, died October 23 at St. Luke's Hospital in his home city. He was 79, and had suffered from emphysema.

A native of Atoka, Tennessee, Doctor Blaydes was a graduate of Webb School in Bellbuckle, Tennessee, and received his medical degree from Vanderbilt University in Nashville, Tennessee. He interned at Vanderbilt, and in New York City.

Doctor Blaydes instituted a special program in 1932 at the West Virginia School for the Blind in Romney which he supervised for 15 years. He also was credited with the original design of a large-figure telephone dial for visually handicapped persons.

A Fellow of the American College of Surgeons and certified by the American Board of Ophthalmology, Doctor Blaydes was a member of the Mercer County Medical Society, the West Virginia State Medical Association, the American Medical Association and a number of other professional organizations.

Survivors include his widow; a son, Dr. J. E. Blaydes, Jr., of Bluefield; two daughters, Mrs. H. H. Pride of Knoxville, Tennessee, and Mrs. John V. Beamer of Atlanta, Georgia; and a sister, Miss Grace Blaydes, Memphis, Tennessee.

* * * *

DANA T. MOORE, M. D.

Dr. Dana T. Moore of Omar in Logan County died October 15 in Holden Hospital after a short illness. He was 74.

A 1925 graduate of the Medical College of Virginia in Richmond, Doctor Moore formerly also was in general practice at Stirrat, in Logan County; in Harrisville, and in Parkersburg.

He had served as a Logan County health officer, and was a veteran of World War II. He was a member of the Logan County Medical Society; the West Virginia State Medical Association, and the American Medical Association.

Survivors include his widow; two sons, Dana T. Moore, Jr., of Elon College, North Carolina, and William Moore of Wingate, North Carolina; and a sister, Mrs. Virginia Hinebaugh, of Baltimore, Maryland.

* * * *

WILLIAM R. RICE, M. D.

Dr. William R. Rice, a general practitioner in Dunbar for 25 years, died October 25 in a Charleston hospital after suffering a stroke at his home three days earlier. He was 54.

A native of Randolph, Virginia, Doctor Rice received his undergraduate degree from West Virginia University and his medical degree from Northwestern University in Evanston, Illinois, in 1943.

He interned at the U. S. Naval Hospital in Corpus Christi, Texas, and served his residency at Charleston General Hospital. Doctor Rice established his practice in Dunbar after World War II service as

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a Navy medical officer in the South Pacific, and also saw active Navy duty during the Korean War.

Doctor Rice was a member of the Kanawha Medical Society and the West Virginia State Medical Association.

Survivors include the widow; a son, Stephen Rice, of Charleston; two daughters, Mrs. Pamela Faircloth of Chapel Hill, North Carolina, and Miss Melinda Rice, a student at St. Andrews Presbyterian College in Laurinburg, North Carolina; his mother, Mrs. A. G. Rice, Sr., of Dunbar; a brother, Alexander G. Rice, Jr., of St. Albans and one sister, Mrs. Marguerite Martin of Huntsville, Alabama.

County Societies

CABELL

Dr. John G. Barker, President of Marshall University, discussed problems in higher education and the needs and future of Marshall at an October 14 meeting of the Cabell County Medical Society at Huntington's Frederick Hotel.

The Society approved a motion for appointment of a committee by Dr. Jack O. Sheppe, its President, to propose a contribution to Marshall in memory of Drs. H. D. Proctor, Ray Hagley and Joseph Chambers, who died with members of the University football team in the November, 1970, plane crash.

The Society accepted Dr. Florenda C. Alquizola as a new member.—G. E. Vanston, M. D., Secretary.

* * * *

HARRISON

Dr. Charles E. Copeland, Chief of General Surgery and Director of the Burn Unit at Pittsburgh's Mercy Hospital, spoke on "Topical Therapy of Burns" at a regular meeting of the Harrison County Medical Society October 9 at the Holiday Inn on Bridgeport Hill.

Doctor Copeland is a Diplomate of the American Board of Surgery and Fellow of the American College of Surgeons. He has a medical degree from the University of Pittsburgh, where he currently is Clinical Assistant Professor of Surgery.

Forty members and 21 guests attended the meeting. The Society accepted Drs. Gasper Barcinas and Victorino Chin as associate members.—Robert D. Hess, M. D., Secretary.

* * * *

MERCER

Committees on nominations; drug information, and a study of the feasibility of a Health Maintenance Organization in Mercer County were appointed by President Richard O. Rogers, Jr., of the Mercer County Medical Society during and after

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CHILD PSYCHIATRY

GILBERT SILVERMAN, M. D.
Associate in Child Psychiatry

ADMINISTRATION

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Administrator

a regular October 18 meeting at Bluefield's West Virginian Hotel.

The Society approved membership applications from Drs. Thomas Mathew, Mhamed Z. Shama and Chungkook Kim, and gave Dr. E. Lyle Gage a standing ovation in recognition of valuable service to the medical profession. Doctor Gage retired recently.

Discussions of legal problems related to prescribing birth control pills, and the adoption of a motion urging the Bluefield City Board to reinstate a reduction in its contribution to the Mercer County Health Department, were among other items of business.—John J. Mahood, M. D., Secretary.

* * * *

McDOWELL

Dr. R. W. Hansen presented a film, discussed by Dr. F. C. Rausa, on the use of Levodopa therapy in treatment of Parkinson's disease at the October 13 meeting of the McDowell County Medical Society held at the Stevens Clinic Hospital in Welch. Seven members and two guests were present.—J. C. Ray, M. D., Secretary.

* * * *

MONONGALIA

The Monongalia County Medical Society heard a presentation by Drs. Edmund B. Flink and Dr. Stanley R. Shane of West Virginia University's School of Medicine on "Problem Oriented Clinical Record Keeping (Weed Technique)" at its October 5 meeting in Morgantown.

The Society welcomed to full active membership Drs. Frank W. McKee, John Joseph Renn, III, and Joe W. Rhudy. The Society approved several actions of its Council, including a donation to WVU-SAMA for an advertisement project.—William G. Klingberg, M. D., Secretary.

* * * *

OHIO

A special program on "You, The Government, and Your Practice" was offered by the Ohio County Medical Society at Oglebay Park in Wheeling on Thursday, October 28, with Dr. Harry S. Weeks, Jr., of Wheeling, President of the West Virginia State Medical Association, serving as Program Chairman.

Speakers included Dr. Russell B. Roth, Erie, Pennsylvania, urologist who is Speaker of the American Medical Association's House of Delegates and a candidate for election next year as the AMA's President Elect; Dr. Frederick W. Dowda of Atlanta, Georgia, and Mr. James D. Knebel of Chicago.

Doctor Dowda is President of the Georgia Foundation for Medical Care and Secretary of the American Association of Foundations for Medical Care. Mr. Knebel is Executive Vice President of the National Association of Blue Shield Plans.

The program centered primarily about a discussion of the medical foundation movement, and the relationship of Blue Shield and other insurers to such organizations. Visitors from a number of other communities and medical societies in the state joined members of the Ohio County Society and their wives for the afternoon and evening sessions.—Joseph N. Aceto, M. D., Secretary.

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David H. Smith, M. D.

Roentgenology:
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J. N. Aceto, M. D.

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James P. Frum, M. S.

Clinical Laboratories:
Kathleen Nickerson

Technologists:
Electrocardiography:
Betty Maguire, R. N.
Electroencephalography:
Joann Green, R. N.
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Roentgenology:
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Permanent Cardiac Pacemaking: Eight Years' Experience in a Community Hospital

Harold D. Warren, M. D., and Walter E. Klingensmith, M. D.

The use of permanent cardiac pacemakers for the treatment of Stokes-Adams attacks is well established. Since the first reports appeared using this method[1-3] there have been progressive refinements in the component parts of pacing systems. Changes in electrode design and composition have made them more dependable and less prone to metal fatigue and electrolysis.[4] The pulse generators have been improved to prevent premature battery depletion and electronic component failure.[5,6] There are now several choices in the delivery of the stimulus ranging from asynchronous fixed rate to synchronous[7] and demand pacing.[8,9,10] The early clinical experience with permanent pacing involved transthoracic implantation of the myocardial electrodes with subcutaneous implantation of the pulse generator[2,3] or receptor for radiofrequency stimulation.[1] More recently, implanted transvenous endocardial systems have proven effective[11,12] These new refinements have led one cardiologist to state "there is no justification for not having installed a pacemaker in a patient damaged or dead because of Stokes-Adams attacks."[13]

Coincident with improvements in the pacemaker systems and the ease of surgical implantation, indications for the use of this method have been broadened to include drug resistant ventricular tachyarrhythmias[15,22] and asymptomatic heart block.[5,17] The latter are included in view of the significant mortality in this group if untreated.[5,17]

The purpose of this paper is to present our experience in the use of permanent cardiac pacemakers at the Beckley Appalachian Regional Hospital from the original procedure done in May, 1962, until the present. Advantage has been taken of the advances in newer equipment and newer methods of surgical approach and management during this period. Follow-up of the patients in this series has been excellent. Most of the Medical Staff of the Hospital have participated in their medical management. Surgical management has been carried out by three surgeons particularly interested in this type of surgery. Basic concepts of pacemaking have been presented in a recent excellent paper, and will not be detailed in this report.[19]

The Authors

- **Harold D. Warren, M. D., Internist, and Walter E. Klingensmith, M. D., Chief, Surgical Service, Beckley Appalachian Regional Hospital.**

Patients and Material

Twenty-seven patients have been treated in this series, ten of whom were female. The ages ranged from 19 to 84 years with predominance in the older age group (Table 1). The foremost symptom was Stokes-Adams attack which occurred in 25 cases. Of the remaining two cases, the patient in one had intractable heart failure due to complete heart block and the other had asymptomatic complete heart block and benign prostatic hypertrophy for which operation was felt to be necessary. Twenty-four patients had complete heart block with a slow idioventricular rhythm; five of these alternated between second degree block, and complete heart block; five had episodes of ventricular tachyarrhythmia, one had periodic ventricular asystole, and one had both types. Of the remaining three, one had second degree heart block associated with left bundle branch block with sinus arrest. One had

second degree heart block with sino-atrial block, and the third had atrial fibrillation with periodic ventricular fibrillation.

Table 1

Age of Patient at Time of Implantation

10-19 Years	1
20-29	0
30-39	0
40-49	0
50-59	3
60-69	10
70-79	11
80-89	2
Total	27

The etiology of heart disease in these patients is listed in Table 2. This is based in part on a clinical estimate and in part on postmortem evidence. The cases of primary heart block (felt to be due to sclerosis of the fibrous cardiac skeleton)[13] comprise about one-half of the total. One case in a 19-year-old patient would appear to be congenital in origin because there was no convincing evidence of prior infection or infiltration. One had rheumatic heart disease with mitral insufficiency. Among those patients whose etiology was coronary heart disease, four gave a history of angina pectoris, and three had prior myocardial infarctions. Congestive failure was present in eight of the 27 patients.

Table 2

Etiology of Heart Disease

Primary	15
Coronary Heart Disease	10
Congenital	1
Rheumatic Heart Disease	1
Infiltrative, etc.	0
Total	27

Since the majority of the patients were between 60 to 84 years, associated diseases were common. Among these were diabetes mellitus in six, hypertension in six, and pneumoconiosis in six. Three had pulmonary emphysema, two had Parkinsonism, and there was a variety of other diseases occurring singularly.

Twenty-five patients were paced with Medtronic pacemakers, one with an Electrodyne, and one with a Cordis Ventricor (Table 3). Three of the transthoracic fixed rate pacemakers were changed to transvenous fixed rate pacemakers because of infections (see under Complications). There have been 13 changes of pulse generators in this series, either elective because of duration of implantation, or because of infection, or failure of the pulse generator.

Table 3

Types of Pacemaking Systems

Transthoracic—fixed rate	14 Medtronics*	1 Electrodyne**
Transthoracic—demand	2 Medtronics	1 Cordis
Transvenous—fixed rate	5 Medtronics	
Transvenous—demand	4 Medtronics	

*Two changed to transvenous fixed rate (Medtronics).
**Changed to temporary transvenous fixed rate.

Results

Twenty of the 27 patients are living and well (Table 4). Those not retired have returned to their previous occupations. Patients are followed in the clinic at one to three monthly intervals. Immediate and late complications are noted in Table 5 and those related to the pacemaking system will be discussed in more detail. Irreversible ventricular fibrillation occurred in one patient eight hours after the implantation of a transthoracic fixed rate pacemaker. He was monitored carefully post-implantation and at no time showed any ventricular premature contractions, and had complete capture up until the time of the onset of the ventricular fibrillation. Despite heroic measures which included DC electrical shock and cardiopulmonary resuscitation, it was impossible to convert the ventricular fibrillation and the patient died. Cardiac arrest occurred in one patient early in the series during thoracotomy and this patient responded to appropriate treatment. He was without the protection of a temporary transvenous pacemaker. Another patient whose capture was irregular immediately after implantation of a transvenous demand pacemaker, responded post-implantation to treatment of congestive failure. In one patient a drain in a pulse generator pocket became adherent to the silastic seal of the pulse generator and required surgical intervention. Two patients had post-cardiotomy syndrome accompanied by fever, pain in the precordium, and pleural effusion on the left which responded to steroids.

Among the late complications infections occurred in three patients despite the routine use of preoperative broad spectrum antibiotics. In none of the three did the infection itself induce

Table 4

Results

Years Paced	*Number of Patients*	*Pacemaking Deaths*	*Other Causes Deaths*
7-8	2	0	0
6-7	1	0	0
5-6	1	0	0
4-5	3	0	0
3-4	1	0	0
2-3	3	0	1
1-2	6	?1	0
1	10	?1	3
	0	1 Known	0
Total	27	3	4

Table 5

Complications-Immediate (During Hospitalization)

1.	Ventricular fibrillation irreversible	1
2.	Mesenteric thrombosis	1
3.	Competition with intrinsic pacemaker	1
4.	Post-cardiotomy syndrome	2
5.	Uremia, reversed with pacing	1
6.	Failure to capture at first, reversed following treatment for congestive failure	1
7.	Stimulation of rectus muscle (Cordis pacemaker)	1
8.	Subcutaneous emphysema (transthoracic approach)	1
9.	Drain adherent to silastic seal of pulse generator	1
10.	Cardiac arrest prior to implant (no pacing catheter I.V.)	1
	Total	11

Complications Late

1.	Infections	3
2.	Premature failure of power source	5
3.	Competition with pacemaker known in	2
	? in	1
4.	Wire fracture	1
	Total	12

an increase in pacing threshold; in each instance, however, control of the infection was not well attained until the generator and the electrode system were entirely relocated. All three patients initially had implanted thoracic epicardial pacemakers. The first patient, an elderly woman with a chronic staphylococcal abscess in the right lung, manifested loss of pacemaker function two and a half years after insertion of an Electrodyne, transthoracic pacemaker. Replacement of the pulse generator was accomplished but resulted in no better stimulation and was complicated by a purulent staphylococcal infection in the pacemaker pocket. The pulse generator was removed and attached to a temporary pacing catheter introduced through the right external jugular vein. This makeshift arrangement housed in a vest with a pocket served her well until her death five months later of bronchopneumonia. Autopsy revealed a fracture of one of the monofilament myocardial electrode loops. Thirteen months after an elective replacement, the second patient with an infection developed a little redness over the pigtail extension of her left subcostal Medtronic pulse generator, several days after wearing a newly fitted corset. Erosion through the skin and suppuration (Staph. albus) ensued. The extrathoracic portion of her infected pacemaking system was removed and replaced by a right external jugular implanted pacemaker. Two months later infection was noted at the intercostal site where the leads had been severed and at subsequent thoracotomy the entire length of the epicardial leads was removed. Infection was present along the track all the way to the heart, but was readily controlled by removal of all foreign material. The third patient developed infection unaccountably eleven months after the thoracic implantation of a Medtronic pacemaker. This was clinically a trivial infection (Proteus) at the medial side of the generator pocket but was controlled only by removal of the extrathoracic portion of the infected system and replacement with a right external jugular endocardial pacemaker. Thus far (nine months) the remaining intrathoracic portion of the original electrodes has shown no evidence of infection.

Failure of the pulse generators was noted at 18 months, 22 months, 24 months, and two at 30 months in five patients, respectively. The failure was manifested by slowing of the pacemaker signal in four, with one instance of complete loss of signal and reversion to complete heart block. In one a modest increase in rate was noted. All had replacements with the resumption of captured rhythm. Competition with the intrinsic pacemaker occurred in two patients on fixed rate pacemakers. In one the competition ceased after pacing for several months and has not returned. The other patient died suddenly at home after being paced for 21 months. At the time, the patient had thrombophlebitis for which she refused hospitalization and it is not possible to tell whether she had a pacemaker-provoked arrhythmia or a pulmonary embolus. No autopsy was obtained. We have been fortunate in our small series of transvenous pacemakers in not having displacement of the catheter electrodes, ventricular perforation or hemorrhage.

There have been seven deaths in this series, with six autopsies (Table 6). Causes of death and the postmortem findings are listed. One of the deaths definitely was related to pacemaking (see above). Possible ventricular arrhythmia might have occurred in a patient with competitive rhythm who had been paced for 21 months. Another sudden death occurred in a patient who had been paced on a fixed rate pacemaker for five months and who at no time during follow-up had ever had a competitive rhythm. His wife noted that just before his death he had an irregular pulse. The remainder of the deaths were due to causes unrelated to pacing.

Discussion

The decision to implant a permanent pacemaker must be made after the exclusion of cases of complete heart block and ventricular arrhythmias of a transient nature occurring in acute myocardial infarction, myocarditis, digitoxicity or other drug toxicity, and electrolyte disturbance, primarily potassium, for which temporary transvenous pacing will suffice. Elimination of these leaves a residual population for permanent pacing. The indications have broadened over the past ten years to include drug resistant tachy-

arrhythmias[15,22] unrelated to block and asymptomatic complete heart block with low heart rates.[5,17] Temporary transvenous pacing for a suitable period is important in evaluating the effects of pacing on these patients; to establish the optimal rate for pacing, to improve the state of the myocardium, to correct congestive failure, to improve renal function, and to protect the patient during the definitive operation.

Fixed rate pulse generators, because of extensive use, reliability and simplicity of components continue to be the choice for patients with persistent complete heart block and ventricular tachyarrhythmias. Demand pulse generators appear superior in cases of intermittent heart block, and sinus bradycardia with sinus arrest and sino-atrial block,[8,9,10] because they lessen the possibility of triggering fibrillation.[21] Since many of those patients with complete heart block have been noted to resume sinus rhythm[10] with the associated competition, it is anticipated that further experience with demand pacemakers will render fixed rate pacemakers obsolete.[14] The demand pacemakers have been used in our cases with the arrythmias noted as soon as they become available. Synchronous pacing has been chosen by others[7,23] for use in patients requiring increased stroke volume and rate response available in this mode of pacing. This type of pacing would not apply to the majority of patients in our series because of the adequate stroke volume obtained in fixed rate and demand pacemakers in this older age group.

Permanent transvenous pacemakers have been selected for those patients in whom thoracotomy is contraindicated. For those in a younger, more active group, and for those in whom many years of pacing may be expected the transthoracic approach is more reliable. Completely implanted systems are more acceptable to most patients and lessen the possibility of accidental interruption of pacing.[5] A careful follow-up in the immediate post-implantation period must be carried out.[5] The appearance of premature beats must be aggressively treated and review of medications must be made. After discharge from the hospital regular visits at one to three monthly intervals with careful examination and scrutiny of the electrocardiogram should be routine.[20] Pulse generators of the Medtronic type should be changed in 30 months even though pacing well. It is estimated that 10 per cent of the implanted pulse genators of this type will fail before this time but careful follow-up will reveal these failures early and a change of pulse generator can be made.

Summary

Since 1962, at the Beckley Appalachian Regional Hospital, we have implanted 40 cardiac pacemakers in 27 patients (13 pulse generator changes). Twenty of these patients are alive and well. Of the seven deaths in our series one was assuredly related to pacing, and pacing may possibly be implicated in two others. Problems inherent in pacemaking and complications occurring in our series are presented.

Acknowledgment

We wish to thank the members of the Medical Service and Surgical Service of the Beckley Appalachian Regional Hospital for the use of their cases and John Ellison for technical assistance.

A list of references may be obtained by writing The Journal.

Table 6

Deaths

Causes	*Time Rate*	*PM Findings*
1. Irreversible ventricular fibrillation	8 hours	Moderate to severe coronary arteriosclerosis. Benign hypertrophy of prostate with bladder trabeculae and diverticulae.
2. Mesenteric thrombosis	5 days	Adrenal venous thrombosis with adrenal hemorrhage, moderate coronary arteriosclerosis. Postoperative bowel resection.
3. Cerebral thrombus Myocardial infarct	15 days	Right vertebral artery thrombosis, healed myocardial infarct, posterior coronary arteriosclerosis.
4. Pneumonia	18 days	Right and left ventricular hypertrophy. Severe coronary arteriosclerosis. Bronchopneumonia.
5. Competition possible	5 months	Left ventricular hypertrophy. Marked coronary arteriosclerosis.
6. Competition Thrombophlebitis ? Pulmonary infarct	21 months	No postmortem.
7. Pneumonia	34 months	Bronchopneumonia, calcific aortic stenosis, bilateral ventricular hypertrophy, coronary arteriosclerosis. Abscess right lung. Fracture of electrode lead.

Adenocarcinoma of the Endometrium: Diagnosis, Treatment and Results in a General Hospital

Ramon Portales, M. D.

SINCE the beginning of the Cancer Control Registry at Charleston General Hospital on January 1, 1957, the cases of 41 women, aged 32 to 85, have been diagnosed as adenocarcinoma of endometrium. This is a review of the methods of diagnosis, treatment and end results obtained.

The Author

- **Ramon Portales, M. D., 1218 Virginia Street, East, Charleston; This paper was written while the author was serving as Chief Resident in General Surgery at Charleston General Hospital.**

Material and Methods

All 41 cases diagnosed or referred to Charleston General Hospital as adenocarcinoma of endometrium from January 1, 1957, to date, were reviewed. Hospital records, including the hospital tumor registry cardex, were obtained and data pertaining to menstrual irregularities, abnormal vaginal bleeding, fertility, marital status, race, menopause, serum glucose levels and the presenting complaints were tabulated.

Physical findings pertaining to size of the uterus and ovaries, obesity, weight, and hypertension with recorded blood pressure were noted.

Histologic sections were classified as well differentiated, moderately differentiated and poorly differentiated on the basis of abnormal gland formation, degree of nuclear atypia and number of abnormal mitosis. These were reported according to Broder's classification in order to give an idea of the findings. If a hysterectomy had been performed, the report was evaluated for depth of invasion and appearance of surrounding tissue. The pathologic findings related to the ovaries and tubes were also noted.

Methods of treatment were evaluated and follow-up information was obtained in all but seven cases.

Clinical.—(Table 1) Twenty-nine patients were between the ages of 50 and 69 years. One patient was 32 years old and two patients were 80 years of age at the time of diagnosis of adenocarcinoma and endometrium. The median age was 59.5 years.

Five patients were nulliparous, eight had had more than four pregnancies, including one grand multipara of 13. Parity was not recorded in seven cases. Median parity was 2.5 pregnancies.

The most common complaint was menorrhagia and very often accompanied by metrorrhagia in 30 cases. One came with rectal bleeding. One patient had shortness of breath and nonproductive cough. Four patients complained of irregular periods and two of abdominal pain.

The duration of symptoms was from eight to 10 days up to 13 years. Fifty per cent of the patients were seen within four months of onset of symptoms.

Weights were available in 29 cases, 20 of which were classified as obese.

In 18 cases, these was a systolic blood pressure over 140 ml. Eleven patients were under treatment or the diagnosis of diabetes mellitus was made at the time of admission. Thirty-six of the patients were white.

Four patients were taking estrogen-like compounds prior to the diagnosis of endometrial carcinoma in order to regulate abnormal vaginal bleeding. One patient was using an estrogen-like compound as face cream.

Two patients had had radiation therapy either to the abdomen or pelvis 21 to 13 years prior to diagnosis of carcinoma, in one of these cases to stop irregular vaginal bleeding.

Two patients had had gynecologic surgery: one had had amputation of the cervix, the other excision of an ovarian cyst.

None of the patients had Stein-Leventhal syndrome.

Papanicolaou stain was reported in ten cases, showing seven to be consistent with or suggestive of adenocarcinoma of endometrium.

Pathology.—(Tables 2a, 2b, 2c, 2d.) Adenocarcinoma of endometrium was reported on 37

specimens taken from uterine curettements. Diagnostic curettage was done in all but four cases. In one case, definitive therapy was instituted on the report of the Papanicolaou stain alone. In two cases, the lesion was found on resected uterus (done because of "vaginal bleeding") and in the fourth case a diagnosis of primary carcinoma of endometrium was made on postmortem examination. Invasion of the myometrium was found in nine resected specimens, and invasion of the vagina in two. Tumor implants on adnexa were reported in only one case. Metastasis to lungs, mediastinum or abdomen was reported in three cases. Invasion of the cervix was reported in one case. Uterine fibroids were reported in seven cases.

Polycystic ovaries and functioning ovarian tumors were not found in these patients. Aberrant adrenal tissue was found in one ovary and simple fibroma of the left ovary was reported in another specimen.

Treatment

This group of patients, forty of these originally diagnosed as having adenocarcinoma of the endometrium, were treated by a wide variety of methods. Thirty-five underwent total abdominal hysterectomy (TAH) and bilateral salpingo-oophorectomy (BSO). One patient underwent a radical hysterectomy, Wertheim-Miggs type, one a subtotal hysterectomy only. In two cases the cervix was closed before performing the total abdominal hysterectomy. In two cases an

Table 1

Clinical Data

Pte	*Age*	*Grav.*	*Time Since LMP*	*Symptoms*	*Duration*	*Weight*	*B/P*	*Ser. Gluc.*	*Marit. St.*
1	51	3	4 years	Vaginal bleeding off and on	One year	124	112/60	90 mgrs.	Married
2	61	7	15 years	Vaginal bleeding small amounts	Six months	130	120/72	110 mgrs.	Widow
3	54	1	8 months	Pain low abdomen Yellowish discharge	One month	?	168/90	100 mgrs.	Married
4	85	?	?	Vaginal bleeding	One year	130	102/60	100 mgrs.	Widow
5	54	1	?	Pain right hip and back	Two weeks	Obese	170/70	170 mgrs.	Married
6	76	1	28 years	Vaginal bleeding	Three weeks	140	130/80	100 mgrs.	Widow
7	69	?	20 years	Spotting blood	One year	190	HCVD	145 mgrs.	Married
8	52	2	?	Vaginal bleeding	?	138	143/100	100 mgrs.	Married
9	60	2	5 years	Vaginal spotting Pressure on pelvis	Three months	Obese	160/86	Diabetes M.	Married
10	75	2	18 years	Vaginal spotting	Two months	135	210/90	Diabetes M.	Married
11	58	2	9 years	Pressure on pelvis Spotting blood	Nine months	170	150/90	?	Married
12	55	7	8 years	Vaginal bleeding	Three weeks	176	?	Diabetes M.	Married
13	48	1	9 months	Abnormal vaginal bleeding	Six months	133	122/60	?	Married
14	64	4	11 years	Vaginal bleeding	Two months	Obese	?	?	Married
15	53	2	2 years	Vaginal bleeding	Six months	?	?	Diabetes M.	Widow
16	60	8	10 years	Irregular vaginal spotting	One year	Obese	180/100	100 mgrs.	Widow
17	52	3	?	Vaginal bleeding	Six months	Obese	180/90	?	Widow
18	65	?	15 years	Irregular spotting	Thirteen years	Obese	160/86	Diabetes M.	Married
19	54	2	3 years	Spotting blood	Three weeks	220	130/70	98 mgrs.	Married
20	64	2	20 years	Vaginal bleeding	Four months	Obese	140/75	?	Married
21	61	1	10 years	Low abdominal pain Vaginal bleeding	Ten days	Obese	220/110	?	Married
22	44	1	1 year	Spotting blood	Eight months	?	?	?	Married
23	64	2	22 years	Spotting blood	Four weeks	198	130/80	?	Married
24	70	5	15 years	?	?	131	140/60	?	Married
25	32	0	Irregular	Vaginal bleeding	Four months	186	140/70	?	Married
26	59	?	10 years	Vaginal bleeding	Two months	Obese	130/80	Diabetes M.	Widow
27	66	0	21 years	Vaginal bleeding	Four weeks	?	118/70	?	Single
28	83	7	34 years	Rectal bleeding Nausea, pain LLQ	One month	?	150/60	?	Widow
29	51	?	1 year	Spotting blood	One month	166	134/70	?	Married
30	52	3	2 years	Irregular bleeding	Eight months	136	130/70	?	Married
31	62	0	10 years	Vaginal bleeding	One month	Obese	160/110	110 mgrs.	Single
32	52	0	3 years	Vaginal bleeding	Eighteen months	185	146/70	?	Married
33	63	?	?	Shortness of breath Non-productive cough	One month	?	170/90	?	Married
34	59	4	9 years	Vaginal bleeding	Eight days	?	200/106	?	Married
35	48	0	1 month	Irregular periods	?	?	120/78	?	Married
36	60	6	13 years	Vaginal bleeding	Three weeks	145	130/80	?	Widow
37	66	?	?	Vaginal bleeding	?	?	?	Diabetes M.	Married
38	68	?	27 years	Vaginal bleeding	Ten days	Obese	220/110	Diabetes M.	Widow
39	59	13	13 years	Vaginal bleeding	Two months	Obese	160/100	Diabetes M.	Married
40	No record available								
41	No record available								

Table 2(a)

Diagnosis, Treatment and Follow-Up

Pte	Past Medical History	Horm. Ther.	Pap. Stain	D & C	Ra. Ther.	Surgery	Path. Report	Follow-Up
1	ROS	None	None	None	None	TAH, LOS	Atrophic ovary, tube unremarkable, adenocarcinoma in situ, no invasion. Broder's I	None
2	Hemoptysis Bronchiectasis Adenoma of thyroid Amputation of cervix	None	Class III suggestive of cancer	ADC	None	TAH, BSO	Ovaries atrophic, tubes negative. Broder's III Invasion of myometrium	118 months NEC
3	Unremarkable	Hormone shots (?)	Class II	ADC	Co. AS	TAH, BSO	Foll. cyst of ovaries Broder's III-IV Deep inv. of myometrium	None
4	Thyroidectomy Kidney stones Hematuria	None	Class V	None	None	TAH, BSO	Corpora albicantia of ovaries Broder's III	Expired
5	Phlebitis R. leg.	None	None	ADC	Ra. BS	TAH, BSO	ADC of endometrium Metastasis to pelvis Mediastinum	Expired 21 months
6	Cholecystectomy	None	Class I	AOC	Co. AS	SubTAH BSO	Senile ovaries Broder's IV Inv. of vaginal wall	None
7	LSO	None	None	AOC	Co. As	TAH, RSO	Atrophy of ovary Broder's IV Invasion of entire myometrium	21 months NEC
8	Ouodenal ulcer Radium therapy to abdomen 21 years before diagnosis	None	None	AOC	None	RadTAH BSO, then chemotherapy	Atrophy of ovaries Papillary ADC Broder's IV Invasion of tubes and vaginal wall	Expired 3 months
9	Oiabetes mellitus Hypertension	None	Class V suggestive of cancer	ADC	Ra. BS	TAH, BSO	Atrophy of ovaries Uterine fibroids Broder's III	None
10	Oiabetes mellitus Hypertension	None	None	ADC	None	TAH, BSO	Broder's IV with invasion to entire depth of myometrium Metastasis to lungs (X-Ray)	Expired 25 months
11	Thyroidectomy	None	None	ADC	None	TAH, BSO	Endometrial polyp Broder's I	None

ROS: right oopnorectosalpingectomy. TAH: total abdominal hysterectomy. LOS: left oophorectosalpingectomy. BSO: bilateral oophorectosalpingectomy. Co.AS: cobalt after surgery. Ra.BS: radium before surgery. AOC: adenocarcinoma. RadTAH: radical total abdominal hysterectomy. NEC: no evidence of cancer.

Table 2(b)

Diagnosis, Treatment and Follow-Up

12	Oiabetes	None	None	AOC	None	TAH, BSO	Polypous adenocarcinoma of endometrium with invasion to myometrium Broder's II	6 months NEC
13	Ovarian cyst Poliomyelitis with deformation of legs	Hormones for irreg. periods	None	ADC	Co. BS	TAH, BSO	Ovaries not remarkable Adenocarcinoma of endometrium Broder's II	29 months NEC
14	Oiabetes Old septal infarction Hypertension Nodular goiter	None	None	AOC	Co. BS	TAH, BSO	Broder's II-III Mucoid adenocarcinoma Left ovary unremarkable Uterine fibroid No invasion of myometrium	32 months NEC
15	Diabetes Pulmonary tuberculosis	None	None	AOC	Ra. BS	TAH, BSO	Ovaries atrophic Fungating polypous adenocarcinoma with invasion of myometrium Broder's III	73 months NEC
16	Hypertension Mitral stenosis Rheumatic heart disease	None	Class III Consistent with dysplasia	ADC	Co. BS	TAH, BSO	Ovaries show corpora albicantia Adenocarcinoma of endometrium Broder's II No invasion of endometrium	16 months NEC
17	Hypertension	None	None	ADC	Co. BS	TAH, BSO	Ovaries atrophic Adenocarcinoma of endometrium No invasion of myometrium Broder's II Uterine fibroids	14 months NEC
18	Diabetes	None	None	ADC	Ra. BS	TAH, BSO	Superficially ulcerated anaplastic mucous-producing adenocarcinoma of endometrium No invasion of myometrium Broder's XXX II	No follow-up
19	Not remarkable	None	None	ADC	Ra. BS	TAH, BSO	Papillary adenocarcinoma of endometrium Broder's III	Expired 22 months (at home)
20	Not remarkable	None	Class I	ADC	Co. BS	TAH, BSO	Uterine fibroids Papillary adenocarcinoma of endometrium Ovaries atrophic No invasion to myometrium Broder's II	75 months NEC
21	Hypertension	None	None	AOC	Ra. BS	TAH, BSO	Adenocarcinoma of endometrium Invasion of myometrium Ovaries atrophic Broder's II-III	76 months NEC
22	Not remarkable	None	Class V	ADC	None	TAH, BSO	Adenocarcinoma of endometrium, fundus Aberrant adrenal nodule of one ovary	71 months NEC

exploratory laparotomy was done without resection of the tumor.

Twenty-seven patients were given different doses of radiation, such as radium insertion or cobalt irradiation, as part of the treatment, twenty-two of them before sugery (RaBS) (CoBS) and five after the procedure was performed. Two patients were treated with radiation alone. Twelve patients received no radiation as part of treatment.

Follow-Up.—Seven patients have been lost to follow-up and their status is not known. Follow-up is available for the remaining 34 cases (Table 3). Twenty-four are living without evidence of cancer, 14 of them less than five years, and nine over five years after diagnosis had been made. Ten patients expired, nine of them after the diagnosis was made, and in one case diagnosis was made on postmortem examination. Five patients died of carcinomatosis, but permission for postmortem examination was not obtained, with the exception of one patient. Three died at home of unknown cause and two of myocardial infarction.

Table 2(c)

Diagnosis, Treatment and Follow-Up

Pte	*Past Medical History*	*Horm. Ther.*	*Pap. Stain*	*D & C*	*Ra. Ther.*	*Surgery*	*Path. Report*	*Follow-Up*
23	Bronchial asthma Hypertension	None	None	ADC	None	TAH, BSO	Adenocarcinoma of endometrium Adeno-acanthoma type Broder's III No invasion of myometrium	12 months NEC
24	Radical mastectomy (intraductal adenocarcinoma)	None	None	ADC	None	TAH, BSO	Simple fibroma of left ovary Adenocarcinoma of endometrium Broder's II No invasion to myometrium	144 months NEC
25	Anemia	Enovid	None	ADC	Ra. BS	TAH, BSO	Adenocarcinoma of endometrium Broder's II-XXX	36 months NEC
26	Diabetes Umbilical hernia	None	None	ADC CMH	Ra.	Expl. lap. Metastasis	Endometrial papillary adenocarcinoma Broder's III Broder's III	13 months
27	Not remarkable	"Hormone shots to stop bleed."	None	ADC	Ra. BS	TAH, BSO	Adenocarcinoma Atrophy of ovaries Fibromyoma of uterus	No follow-up
28	Cholecystectomy Pneumonia Anemia	None	Class V	ADC	Co. therapy		Anaplastic, undifferentiated squamous cell ca. of cervix spreading into endometrium	Expired at home 3 mos. after diag.
29	Not remarkable	None	None	ADC	Ra. BS	TAH, BSO	Adenocarcinoma of endometrium Broder's II Atrophy of ovaries	21 months NEC
30	Not remarkable	None	None	ADC	Co. BS	TAH, BSO	Atrophy of ovaries Adenocarcinoma of endometrium Broder's II-III	52 months NEC
31	Hypertension	None	None	ADC	Co. therapy only Surgery not Ad. Metastasis		Adenocarcinoma of endometrium	Expired 20 months at home
32	Salpingitis	None	None	ADC	Ra. BS	TAH, BSO	Fibromyoma of uterus Adenocarcinoma of endometrium Broder's I-II	81 months NEC
33	Heart failure Diabetes Hypertension	None	None	None	None	None	Post mortem examination shows carcinomatosis due to endometrial carcinoma	Expired 12 days after admission

Table 2(d)

Diagnosis, Treatment and Follow-Up

34	Not remarkable	None	None	ADC	Ra. BS	TAH, BSO	Fibromyoma of uterus Atrophy of ovaries Adenocarcinma of endometrium Broder's II	121 months NEC
35	Not remarkable	None	None	ADC, MHS	Ra. BS	TAH, BSO	Corpora albicantia of ovaries Numerous fibromyoma of uterus Adenocarcinoma grade II with superficial invasion of myometrium	109 months NEC
36	Hyperthyroiditis Irradiation 13 years before admission	Gynetone repeattabas	None	None	Co. AS	TAH, BSO	Carcinoma in situ Broder's I	52 months NEC
37	Diabetes Hypertension Cholecystectomy	None	None	ADC	ADC	TAH, BSO	Adenocarcinoma of endometrium	No follow-up
38	Hypertension	None	Class IV	ADC	Ra. BS	Expl. lap.	Broder's III	Expired at another hospital 50 months AD
39	Diabetes Cholecystectomy Pulmonary embolism Hypertension		None	ADC	Ra. BS	TAH, BSO	Adenocarcinoma of endometrium Atrophic ovaries Invasion to myometrium	58 months NEC
40	No record			ADC	Ra. BS	TAH, BSO	Adenocarcinoma of endometrium Broder's IV	58 months NEC
41	No record			ADC	None	TAH, BSO	Adenocarcinoma of endometrium fairly well differentiated	Expired 33 months after diagnosis of a MI

Table 3
Follow-Up

Years	*Living*	*Dead*
0	1	3
1	5	1
2	2	4
3	2	1
4	2	1
5	2	
6	4	
7	2	
8		
9	1	
10	2	
11		
12	1	

Discussion

A statistical report is presented concerning the manner of diagnosis and treatment of adenocarcinoma of the endometrium at Charleston General Hospital.

The composite case history represents a white woman in her late fifties, overweight, most likely hypertensive, ten to twelve years post-menopause, with two to three children. She has been sick for approximately four months or less, with menorrhagia and very often with metrorrhagia. The diagnosis is made from uterine curettements. The treatment consists of radium therapy followed shortly by total abdominal hysterectomy and bilateral salpingo-oophorectomy. Seventy-one per cent of cases are shown living and without evidence of cancer.

Comment

Diabetes mellitus and uterine fibromyoma were not constant findings as described in some textbooks.

Papanicolaou stain has a very limited value in detecting adenocarcinoma of the endometrium as compared with that regarding carcinoma of the cervix.

Curettage is a must, not only as a diagnostic procedure but as a guideline in order to undertake the proper therapy.

An often forgotten step in the surgical treatment is the careful cleansing of the vagina and closure of the cervix to prevent vaginal implants.

Progestational agent therapy seems to have a place as a trial treatment in young patients who desire more children; also, it is at present the best offer for advanced metastases. Palliative chemotherapy in the form of alkylating and antimetabolic agents has not been as impressive in the treatment of adenocarcinoma of the endometrium as it has been in that of advanced metastatic lesions of the ovary.

References

1. Copenhaver, E. H. & Barsamian, M.: Management of Adenocarcinoma of Endometrium, Surg. Clin. North America 47:723, 1967.
2. Cheon, H. K.: Prognosis of Endometrial Carcinoma, Obst. & Gynec. 34:680, 1969.
3. Kahler, V., Creasy, R. K. & Morris, J. A.: Value of the Endometrial Biopsy, Obst. & Gynec. 34:91, 1969.
4. Kempson, R. L. & Pokorny, G. E.: Adenocarcinoma of Endometrium in Women 40 and Younger, Cancer 21:650, 1968.
5. Kennedy, R. J.: Progestogens in Treatment of Carcinoma of Endometrium, Surg., Gynec. & Obst. 127:103, 1968.
6. Dunn, L. J., et al: Glucose Tolerance Test and Adenocarcinoma of Endometrium, Arch. Int. Med. 121, 1968.
7. Peterson, E. P.: Endometrial Carcinoma in Young Women, Obst. & Gynec. 31:702, 1968.

A Meeting of the Committee

HAVING served on various committees, I have drawn up a list of rules. Never arrive on time; this stamps you as a beginner. Don't say anything until the meeting is half over; this stamps you as being wise. Be as vague as possible; this avoid irritating the others. When in doubt, suggest that a subcommittee be appointed. Be the first to move for adjournment; this will make you popular; it's what everyone is waiting for—*Harry Chapman.*

Special Article

The Flex Examination in West Virginia

Edward J. Van Liere, M. D.

In the past, physicians who wished to practice medicine in West Virginia (assuming that reciprocity was not feasible) took an examination compiled and given by members of the Medical Licensing Board. The members of the Board graded the examinations carefully to ascertain whether the applicants answered the questions correctly. There was a considerable amount of work associated with these examinations and the members of the Board deserve a great deal of credit for their worthwhile efforts.

The Federation of State Medical Boards of the United States in 1968 introduced a new type of examination known as the Federation Licensing Examination (FLEX). The purpose of this examination was to provide state medical boards with high quality, uniform, and valid examinations. The FLEX examination is scheduled for a three day period and is given twice a year, in June and December. On the first day a comprehensive examination on the basic sciences (anatomy, biochemistry, microbiology, pathology, pharmacology, and physiology) is given. The second day there is a comprehensive examination on the clinical sciences. The third day is devoted to an objective test of clinical competence, similar to that of the National Boards, Part III. The test questions are selected by the Federation's Examination Committee from questions previously used in National Board Examinations. The primary criterion for selection is the relevance of the questions for the general practice of medicine today.

The state licensing boards which adopt the FLEX examination are given time to adjust their own rules and regulations for their policy. For example, the year of internship or two years of residency training were eliminated as a requirement for taking the FLEX examination by the West Virginia Medical Licensing Board in April 1970. At present each state board has the option of continuing with its own state board examinations or adopting the FLEX examination. West Virginia was one of the seven states which adopted the FLEX program in 1968. It is estimated that during this year (1970), probably over half of the states will be in the FLEX program.

The Author

- **Edward J. Van Liere, M. D., Emeritus Dean and Professor of Physiology, West Virginia University School of Medicine, Morgantown.**

The following table gives a summary of results obtained of the FLEX examinations from June 1968 through June 1970:

It will be noted that of the 62 candidates who took their work in the United States medical schools (American in the table) only one failed in the examination which expressed in per cent equals 1.6, whereas of 119 candidates who took their medical work in foreign lands (Foreign in the table) 68 failed or 57.1 per cent, that is, well over half of them. This appears rather shocking. It should be emphasized that all the foreign trained physicians who appeared for the examination took their work in approved medical schools, and their credentials were evaluated by an experienced screening committee. The question arises, of course, whether the cause of the large number of failures should be interpreted to mean that the medical training the foreign graduates received was inferior to that of the students who took their medical work in the United States. One is somewhat loath to accept this view, although several factors might be mentioned which could possibly account for the large number of failures, such as the large medical classes so common in foreign lands; a scarcity of competent teachers; and perhaps a lack of modern equipment. Another possibility which might be mentioned is that the foreign medical graduates were unaccustomed to taking an objective, multiple-choice type of examination. On account, however, of the nature of the FLEX examination it is difficult to believe that a language barrier played an important part. Perhaps the present

data may be too meager to draw sweeping conclusions. The candidates who failed, of course, are eligible for re-examination. It is possible that some of them will do better on a re-examination. It is to be hoped that this is true.

It is noteworthy that in June, 1970, of the 50 foreign medical graduates who took the examination, 28 passed with an average of 70 per cent or better, and 16 per cent of these candidates averaged 75 per cent or better, including four who made averages of 80 per cent or better. Twenty-two foreign medical graduates failed the examination with averages ranging from 69.9 to a low of 59.5 per cent. It is of further interest that 16 candidates, who had not taken an internship, made approximately the same grades as those who had served an internship. This fact would tend to demonstrate that the action taken by the State Medical Licensing Board in April, 1970, was justified. Before, however, a definitive statement can be made concerning this more data are probably needed.

In summary, the FLEX examination presumably is a step in the right direction. The questions asked on the examination are selected by a highly competent and experienced committee; the examination is probably more thorough and somewhat more searching than those given in the past by the average state medical licensing board. It is to be hoped, however, that in the near future not so many of the foreign medical graduates will fail the examination. On the whole, it would seem that the FLEX examination is helpful in determining the competence of physicians to practice medicine in the state, and the members of the State Medical Licensing Board are to be commended for adopting the FLEX program.

Acknowledgment

I wish to express my thanks to Dr. N. H. Dyer, Secretary of the Medical Licensing Board. Without his cooperation this paper could not have been written.

Flex Examination Results

	Number Examined	*Number Passing*	*Number Failing*	*Per Cent Passing*	*Per Cent Failing*	
June 1968	30	29	1	96.7	3.3	American
	1	0	1	0	100	Foreign
	31	29	2	93.5	6.5	Total
December 1968	1	1	0	100	0	American
	7	0	7	0	100	Foreign
	8	1	7	12.5	87.5	Total
June 1969	14	14	0	100	0	American
	36	9	27	25	75	Foreign
	50	23	27	46	54	Total
December 1969	1	1	0	100	0	American
	25	14	11	56	44	Foreign
	26	15	11	57.7	42.3	Total
June 1970	16	16*	0	100	0	American
	50	28	22	56	44	Foreign
	66	44	22	66.7	33.3	Total
June 1968	62	61	1	98.4	1.6	American
Through	119	51	68	42.9	57.1	Foreign
June 1970	181	112	69	61.9	38.1	Total

*Without internship.

Electrocardiogram of the Month

A Recognition of Concealed Conduction

Edward K. Chung, M. D.

Concealed A-V conduction is diagnosed only by the recognition of indirect evidence supplied by the subsequent beat due to the deep, but incomplete, penetration of the impulse into the A-V junctional tissues. Therefore, the term "concealed" is used. The origin of a concealed impulse may be sinus or ectopic, and the impulse may be conducted in an antegrade (forward) or retrograde fashion. Concealed A-V conduction is prone to occur at the transition between an absolute refractory period and the beginning of the recovery period. It is recognized by the unexpected long P-R interval or a blocked P wave, and by the unexpected failure of the subsidiary pacemaker impulse to appear. The most common example of concealed A-V conduction is the full compensatory pause following a ventricular premature contraction and the prolonged P-R interval following an interpolated ventricular premature contraction. Another common example is the grossly irregular ventricular response seen in uncomplicated atrial fibrillation. Various forms of concealed A-V conduction are observed because of the development of a new refractory period created by the deep, but incomplete, penetration of the impulse which influences the subsequent beat.

The Author

- **Edward K. Chung, M. D., Professor of Medicine and Director, Electrocardiographic Laboratory, West Virginia University Medical Center, Morgantown.**

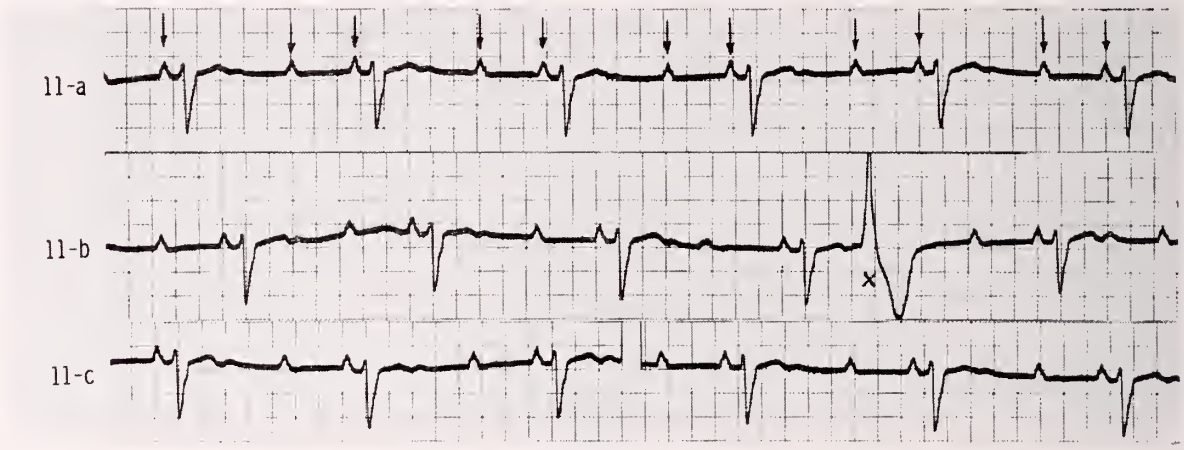


Figure 1

The most common occurrence of concealed A-V conduction is the full compensatory pause following an ordinary ventricular premature contraction (extrasystole) and the long P-R interval following an interpolated ventricular premature contraction. A long pause following a ventricular premature contraction is also often observed in the presence of atrial fibrillation and this is analogous to the full compensatory pause in sinus rhythm.

These electrocardiographic changes occur because the deep penetration of a retrograde ventriculoatrial (V-A) impulse originating from a ventricular ectopic focus creates a new refractory period in the A-V junction which influences the subsequent beat. For the same reason, a longer P-R interval in atrial tachycardia or an unexpectedly blocked flutter wave in atrial flutter may be observed following a ventricular premature contraction due to concealed V-A conduction.

In addition, concealed V-A conduction from a ventricular premature contraction may produce an unexpectedly long P-R interval or a blocked P wave subsequently in the presence of second or high degree A-V block (Figure 1). For instance, the P-R interval of the conducted beat following the ventricular premature contraction in 2:1 A-V block will be longer than those of the remaining conducted beats when concealed V-A conduction occurs in the former. Another example is that the typical feature of Wenckebach A-V block may be altered because of concealed V-A conduction from a ventricular premature contraction. That is, the P-R interval after the pause (dropped P wave) in Wenckebach A-V block is longer than expected when a ventricular premature contraction occurs just before the appearance of the first conducted beat after the pause. Furthermore, concealed V-A conduction from a ventricular premature contraction in the presence of second or high degree A-V block may increase the degree of A-V block. In this case, 2:1 A-V block may become 3:1 A-V block, or 3:1 A-V block becomes 4:1 A-V block because of the unexpected additional blocked P wave (Figure 1).

Clinical Significance

Concealed conduction may occur at any location in the heart but the most common area is in the A-V junctional tissues. The occurrence of a concealed intraventricular conduction is not uncommon. Concealed A-V conduction may be observed in a normal as well as an abnormal heart, but it tends to occur much more frequently in the heart with impaired A-V conduction.

The recognition of concealed A-V conduction is essential to understand various simple and complex cardiac arrhythmias. An unexpectedly long P-R interval or a blocked P wave, or the unexpected failure of the A-V node to produce an escape impulse is often due to concealed A-V conduction. In a practical sense, almost all of the complex arrhythmias may be related to some form of concealed conduction.

Concealed A-V conduction itself does not produce any symptoms or signs, but, an unexpectedly slow ventricular rate or ventricular standstill resulting from concealed A-V conduction certainly may produce Adams-Stokes syndrome and/or congestive heart failure. Thus, the treatment and prognosis depend upon the consequences of the concealed A-V conduction in addition to the underlying heart disease. Concealed A-V conduction is frequently observed in digitalis intoxication since the complex arrhythmias are often produced by the former as well as the latter.

Legend

Figure 1: Leads II-a, b and c are continuous. Arrows indicate P waves. The rhythm is sinus tachycardia (atrial rate: 112/min.) with 3:1 A-V block. It is interesting to note that every third P wave is not discernible. This finding may be due to the fact that the P wave is superimposed on a T wave; although intermittent S-A block cannot be excluded. An area of 4:1 A-V block is produced because of concealed retrograde ventriculoatrial conduction from a ventricular premature contraction (Marked X).

Acknowledgment

I greatly acknowledge the able technical assistance of Mrs. Barbara Napier in her preparation of this manuscript.

More divorces are caused by bad coffee than by good whiskey.

Arnold Glasow

X-Ray Case of the Month

Robert D. Hess, M. D., General Practitioner, Bridgeport; and
Ray A. Harrou, M. D., Radiologist, Bridgeport.

Robert D. Hess, M. D.

General Practitioner, Bridgeport, West Virginia

This 54-year-old white female complained of chills, fever, suprapubic pain, frequency of urination and dysuria. An IVP was ordered.

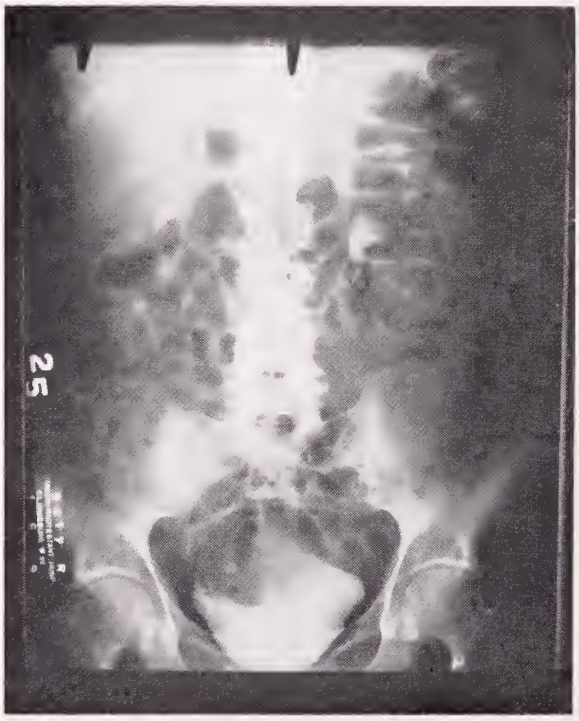
Ray A. Harron, M. D.

Radiologist, Bridgeport, West Virginia

The first film demonstrates gas in the lumen of the bladder and in the walls of the bladder. The second film is taken in the erect position and shows an air fluid level between the intraluminal gas and the contrast agent in the bladder. This condition is cystitis emphysemotasa and is usually a result of E. coli infection in diabetics. Other enteric gas producing organisms may also be the causative agent.

Dr. Hess

The admission fasting blood sugar was 400 mm per cent. Urine culture revealed enterobacter group.



Film 1

Film 2

THE WEST VIRGINIA STATE MEDICAL ASSOCIATION
THE WEST VIRGINIA THORACIC SOCIETY
THE WEST VIRGINIA TUBERCULOSIS AND RESPIRATORY DISEASE ASSOCIATION
and
THE WEST VIRGINIA UNIVERSITY MEDICAL CENTER

are pleased to announce

"The Fourth Annual Mid-Winter Conference On Chest Diseases"

(A Symposium on Air Pollution)

at the

Daniel Boone Hotel
Corner Washington & Capitol Streets
Charleston, West Virginia

Sunday, January 31, 1971
10 A. M. to 4 P. M.

PROGRAM will cover types of air pollutants, including particulates, sulphur oxides, carbon monoxide and others, and their effects on health; with some review of topographical and meteorological conditions as they relate to the air pollution problem in West Virginia.

FACULTY will include a distinguished panel representing the fields of medicine and meteorology from university, public health and other professional settings.

PROGRAM CO-CHAIRMEN: Ralph H. Nestmann, M. D., and Joseph T. Skaggs, M. D., Charleston.

REGISTRATION FEE: A fee of $10.00 will be charged all registrants except nurses, medical students, interns and residents. Fee includes admittance to group luncheon. Advance registration is requested. Checks should be made payable to "WEST VIRGINIA STATE MEDICAL ASSOCIATION."

ACCREDITATION: Attendance at course will be acceptable for credit toward "The Physician's Recognition Award" of the American Medical Association. Application is being made to the American Academy of General Practice for accreditation.

NOTE: The scientific session on January 31, 1971, will be preceded—on Saturday, January 30—by a 1:30-4:30 P. M. conference geared for a lay audience, with this program to be held in the Morris Harvey College Auditorium. There will be NO registration fee for this conference.

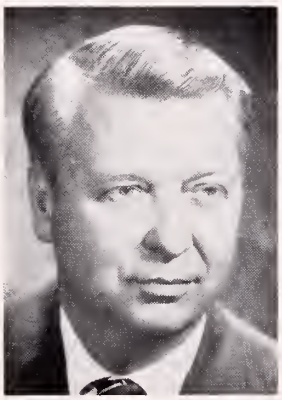
OVERNIGHT ACCOMMODATIONS: Physicians wishing to spend the night in Charleston should communicate directly with the reservation manager of the hotel or motel where they wish to stay.

For advance registration, please complete the following form and mail to: WEST VIRGINIA STATE MEDICAL ASSOCIATION, POST OFFICE BOX 1031, CHARLESTON, WEST VIRGINIA 25324.

Please register me for the Fourth Annual Mid-Winter Conference on Chest Diseases in Charleston on Sunday, January 31, 1971. My $10.00 registration fee is (is not) enclosed.

Name (please print) _____ *Specialty* _____

Address _____ *City* _____



A message from . . .

The President

HAPPY NEW YEAR

In the closing days of the past year, I was impressed with the extent of medical political activity; and the continued need for political action by organized medicine and by individual physicians in hopes of preventing tragedies threatened in future years.

There should be no reticence in expressing our ideas and concerns to each other, nor reticence in discussing the medical problems of today and the potential problems of the future with the public and the Legislature.

Although there are many doubts as to the outcome of Federal invasion into the socio-economic aspects of medicine, I am sure that, through the action of a concerned and responsible physician population, we shall have a

'Happy New Year."

George R. Callender Jrs.

George R. Callender, Jr., M. D., *President*

THE WEST VIRGINIA MEDICAL JOURNAL

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EDITORIALS

THE FLEX EXAMINATION IN WEST VIRGINIA

Elsewhere in this issue of *The Journal* appears an article concerning the Federation of State Medical Boards in 1968. West Virginia was one of the seven states to adopt the FLEX examination the year of its introduction. Since the time of its adoption by the West Virginia State Medical Licensing Board six FLEX examinations have been given. They are offered twice a year, in June and December and last for three days.

The questions are selected by a highly competent and experienced committee and probably are more thorough and somewhat more searching than those given by the average state medical licensing board. The results of the six examinations are given in a table in the article. In brief, 181 candidates took the examination; of these 62 had taken their work in medical schools in the United States, and 119 their medical work in foreign lands. Unfortunately, the foreign medical graduates did not fare well in the FLEX examinations since 57.1 per cent of them failed to pass. Of the 62 candidates who took their medical work in the United States only one failed or 1.6 per cent.

It is difficult to account for the many failures of the foreign medical graduates. They all took their work in approved medical schools and their credentials were carefully examined by an experienced screening committee. Because of the nature of the FLEX examination it is hard to see how a language barrier could account for the large number of failures. Other factors must be considered, such as large classes, so common in foreign medical schools, scarcity of competent instructors and perhaps other matters. The present data may be too meager to draw sweeping conclusions. The candidates who failed in the examination, of course, are eligible to take a reexamination.

In the final analysis, however, it does seem that the FLEX examination appears to be quite satisfactory in helping determine the scholastic fitness of a physician to practice medicine in the State. The members of the State Medical Licensing Board are to be commended for adopting the FLEX program.

Insurance Report

Some 1,274,000 persons under 65 in West Virginia had private hospital expense insurance at the beginning of last year, reports the Health Insurance Institute. There were 1,190,000 person under 65 in the State with surgical expense insurance, 1,085,000 with regular medical expense insurance, and 495,000 with major medical expense coverage.

The Institute also reported that total health insurance benefits paid in the state by private health insurance organizations were $95,459,000 for 1967.

A breakdown of the benefits showed that insurance companies paid $50,633,000, while the other insuring groups paid the remainder.

GENERAL NEWS

Teaching Hospitals Council Seeks More Physicians

The West Virginia Joint Council on Teaching Hospitals has endorsed comprehensive new efforts to encourage more graduates of the West Virginia University School of Medicine to go into practice in this state.

Acting at a December 3 meeting in Parkersburg, the Council agreed to provide what help it can in steps by the WVU School of Medicine and its Alumni Association to re-establish contacts with graduates, including those still in training at various places around the nation.

The new approach calls for an invitation to those graduates to express any interest they might have in practicing in West Virginia; and to seek their permission for their names and their specialties to be published in the *West Virginia Medical Journal* so that interested physicans might contact them.

Matters for Action

In other action, taken largely on recommendations from its Long Range Planning Committee, the Council:

Directed its leadership to encourage better communications between program and/or medical directors at its member hospitals and their counterparts at the WVU School of Medicine, particularly in light of training many fourth-year medical students now are receiving at the hospitals.

Directed that steps be initiated toward publishing and distribution among the Council membership of existing guidelines and agreements on exchange residency programs in West Virginia as a means of strengthening opportunities for this graduate level work.

Approved steps by the Council leadership toward establishing cadres of perhaps five program directors from among staffs at member hospitals to provide consultation hospitals having difficulties with particular programs might voluntarily request, and use beneficially.

Approved Council involvement in the development—in concert with the State Medical Association's Committee on Medical Education and Hospitals, the West Virginia Regional Medical Program and others—of seminar and other programs in the general area of continuing education.

Decided that it should no longer concern itself with non-hospital based experience that might be provided fourth-year WVU medical students. That decision means that, from the Council's standpoint, any contract for selective experience for a student away from the WVU campus in such a setting as a physician's office properly should be one between the WVU School of Medicine and the physician.

Initial recommendations regarding the future direction the West Virginia Joint Council on Teaching Hospitals might take emerged from the first meeting of the Council's new Long Range Planning Committee in Morgantown on October 3. Seated, left to right, are three of the Planning Committee members; Mr. Eugene L. Staples, Director of University Hospital at the West Virginia University Medical Center; Mr. Deal H. Tompkins of Charleston, the Committee Chairman and Vice Chairman of the Joint Council; and Dr. A. Kyle Bush of Philippi. The other two committee members, not pictured, are Dr. Forest A. Cornwell of Beckley and Mr. Leo Carsner, Administrator of Camden-Clark Memorial Hospital in Parkersburg. Among WVU staff members meeting with the Committee were (back row above, left to right) Dr. Roland Schmidt, Acting Assistant Dean for Curriculum at the WVU School of Medicine; and Dr. David Z. Morgan, Assistant Dean of the School of Medicine and also the current Chairman of the Joint Council on Teaching Hospitals.

Weirton Hospital Admitted

Accepted, subject to further refinement, new guidelines for membership in the Joint Council; and admitted Weirton General Hospital as the Council's second Associate Member. Clarksburg St. Mary's Hospital is the other Associate, with the same membership benefits as any of the 12 participating members except that its representatives do not have votes on Council actions.

The Weirton hospital was eligible for associate, rather than participating, membership because it is not currently approved for internship or residency programs.

The Council, in adopting another recommendation from its Long Range Planning Committee, directed

that its Chairman, Dr. David Z. Morgan of Morgantown, and the WVU School of Medicine prepare the first in a series of annual reports covering program developments, Council activities, and the like for consideration by the full Council membership. The first such report will be due by June of this year.

Twenty-two Council members, or their representatives, and guests were present for the December 3 meeting.

Doctor Andrews Appointed To Advisory Council

Gov. Arch A. Moore, Jr., has appointed Dr. Charles E. Andrews, Provost of Health Sciences at the West Virginia University Medical Center in Morgantown, to the State's Comprehensive Health Planning Advisory Council for a term to end April 30, 1973.

Others named to the Council for similar terms were Dr. John E. Echols, Lewisburg dentist; Mr. Haskell D. Shumate of Union in Monroe County; Mr. Eugene L. Pleninger and Mrs. Turner L. Sturm, both of Parkersburg; Mr. E. Carlisle Day, Welch; and Mrs. Bennie Green, Fairmont.

Governor Moore also named Joseph W. Kessel of Keyser to the State Board of Health.

Tiny Hearing Aid Studied

A tiny hearing aid which can be implanted in the ear for a lifetime of service might be available in the next few years, the National Society for Medical Research has reported. The new device is currently under study with laboratory guinea pigs at the University of Oregon Medical School.

MLB Licenses 24 Physicians To Practice in State

The Medical Licensing Board of West Virginia licensed by reciprocity the following 23 physicians to practice in the State of West Virginia at a meeting held at The Capitol in Charleston on October 5, 1970:

Carter, William Henkel, Charleston
Cassidy, Eugene Patrick, Morgantown
Chadwick, Donald Roger, Beckley
Culley, James Paul, Morgantown

Echols, William Jerry, Huntington
Edwards, Tilman Keith, Bluefield
Elvove, Robert Morton, Lewisburg
Frack, Herman, Oak Park, Ill.
Frank, Kay Ellen, Elkview

Gallup, Samuel Charles, Charleston
Hall, William Lloyd, II, Morgantown
Hines, Carl Raymond, Wheeling
Kimball, Maxwell Crooks, Parkersburg
Kreider, Elvin Groff, Philippi
Nichols, Roger Phillip, Morgantown

Parker, John Bryan, Petersburg
Pittenger, Rex Arthur, Pittsburgh, Pa.
Rowe, Buford Edward, Williamson
Tannenbaum, Richard Eliot, Morgantown

Turndorf, Herman, Morgantown
Tweel, Harry Karl, Huntington
Wible, Kenneth Lee, Morgantown
Awny, Ahmed Josef, Beckley

The following physician was licensed by direct examination to practice medicine in the State of West Virginia at a meeting held June 16-18:

Nemeck, Jaroslav, Clarksburg

The next meeting of the MLB will be held at The Capitol in Charleston on January 11, 1971, for the purpose of licensing physicians by reciprocity and temporary licensure to practice medicine in the State of West Virginia.

Here, in the left photo above, are West Virginia University School of Medicine Alumni Association officers elected during the school's first Alumni Weekend November 13 and 14 in Morgantown. Seated, from left to right, are Drs. Pat A. Tuckwiller of Charleston and William N. Walker, Jr., of Bridgeport, Executive Council, and Dr. Robert D. Hess, also of Bridgeport, President. Standing, left to right, are Dr. James H. Wiley of Morgantown, Vice President; Dr. Edward J. Shahady of Tallmadge, Ohio, Executive Council, and Dr. David Z. Morgan of Morgantown, Assistant Dean of the WVU School of Medicine, Council Chairman. In the right photo, Mrs. Fred Decker (right) of Vienna is pictured with Dr. and Mrs. Clark K. Sleeth beside a portrait Mrs. Decker painted of Doctor Sleeth, the School of Medicine's former Dean. The Alumni Association presented the portrait to the Medical Center in recognition of Doctor Sleeth's "many years of faithful service to the School of Medicine."

Faculty Participants Named For Pollution Symposium

The faculty continues to take shape for the Symposium on Air Pollution to feature the Fourth Annual Mid-Winter Conference on Chest Diseases at the Daniel Boone Hotel in Charleston from 10:00 A.M. until 4:00 P.M. on Sunday, December 31.

The scientific program on Sunday will be preceded by a 1:30-4:30 P.M. conference for the general public in the Morris Harvey College Auditorium on Saturday, December 30, on the kinds of air pollutants and their effects on health.

The same general group of speakers will participate in both the Saturday and Sunday programs. As in the past, there will be a $10 registration fee for physicians attending the Sunday meeting, with that amount to include a group luncheon.

Advance registration is urged, and checks should be made payable to the West Virginia State Medical Association, Post Office Box 1031, Charleston 25324.

Dr. Charles E. Andrews, Provost of Health Sciences at the West Virginia University Medical Center, will serve as moderator for the Saturday program, with Dr. William K. C. Morgan, Associate Professor at the West Virginia University School of Medicine, holding a similar role on Sunday.

Faculty members for the symposium, which will cover such air pollutants as particulates, sulphur oxides and carbon monoxide—as well as topographical and meteorological conditions as they relate to West Virginia's air pollution problem—will include:

Bertram W. Carnow, M. D., currently Medical Director of the Tuberculosis Institute of Chicago and Cook County, and an Associate Professor of Preventive Medicine and Community Health at the University of Illinois College of Medicine. He also heads the College's Section of Environmental Health.

John Rankin, M. D., Professor and Chairman, Department of Preventive Medicine, University of Wisconsin; and formerly Director, Pulmonary Research and Training Program at Wisconsin.

Carl Shy, M. D., on the staff of the National Air Pollution Control Administration with offices in Durham, North Carolina.

Paul Humphreys, a meteorologist with the U. S. National Weather Service who also is based in North Carolina.

Mr. Carl G. Beard, Staff Director of the West Virginia Air Pollution Control Commission, will introduce the Saturday afternoon program, with Doctor Morgan leading a summary discussion in which all speakers will participate.

Doctors Ralph H. Nestmann and Joseph T. Skaggs, both of Charleston and Co-Chairmen of the Conference, have emphasized that both Saturday and Sunday programs will represent "strictly an educational effort" to identify various pollutants and explain health effects that can result from them.

In the left photo above, the West Virgiina State Medical Association's two representatives in the American Medical Association's House of Delegates chat with Dr. Wesley W. Hall of Reno, Nevada, the AMA President Elect, just before a session of the House during the 24th AMA Clinical Convention in Boston, Massachusetts. Pictured with Doctor Hall are Dr. Frank J. Holroyd of Princeton (left) and Dr. Richard E. Flood of Weirton. Doctor Hall has accepted an invitation to address the State Medical Association's 104th Annual Meeting next August 19-21 at The Greenbrier in White Sulphur Springs. In the right photo, three other members of the State Association delegation to the November 29-December 2 meeting listen with interest to House of Delegates proceedings. In the right-center, closest to the camera, is Dr. Harry S. Weeks, Jr., of Wheeling, the State Association's President Elect. On Doctor Weeks' right are Dr. Richard W. Corbitt of Parkersburg and Dr. Maynard P. Pride of Morgantown, both Past Presidents of the Association. Doctor Corbitt is a member of the AMA Committee on Medical Aspects of Sports, and presided over a session of the 12th National Conference on the Medical Aspects of Sports held on November 29 in conjunction with the Clinical Convention.

State's Over-50 Population Continues to Show Gain

A new vital statistics report just released by the State Health Department's Division of Vital Statistics gives an analysis of births, deaths, fetal deaths, marriages, divorces and annulments occurring in West Virginia during calendar 1969. Birth and death records have been kept by the State Health Department since 1917.

Since 1950, West Virginia has experienced a net loss of its under-50 population, while during the same period of time the number in the 50-and-over age group has dramatically increased.

Dr. N. H. Dyer, the State Health Director, said that our aging population has had a significant effect on the State's birth and death rates. From 1925 to 1952, West Virginia's crude birth rate exceeded that of the United States. Since 1953, however, although both the United States and West Virginia birth rates were declining, West Virginia's rate fell below and stayed below that of the United States. A total of 28,645 live births was recorded for the State in 1969. From 1925 to 1956, West Virginia's crude death rate was below that of the United States. Since that time, West Virginia's crude death rate has been higher than that of the United States.

In calendar year 1969, 19,696 resident deaths were recorded with a rate of 11.6 deaths per 1,000 population. The 65-and-over age group showed the most significant increase in 1969, as it has since 1945. Deaths of the under-one age group have shown the most dramatic decline since 1945. This may partially be attributed to increased pre-natal care and in-hospital births. The report shows that the rate of hospitalization of live births has increased much more dramatically for West Virginia than for the United States over the past 20 years. Maternal mortality rates have also been affected by increased care of the mother. In 1969, there were only three deaths attributed to maternal causes.

Diseases of the heart continue to claim the greatest number of lives, both in the State and the nation. The 10 leading causes of death in the State included:

Rank	Cause	No.	Percent
1.	Diseases of the heart	7,617	38.7
2.	Malignant neoplasms (cancer)	3.049	15.5
3.	Cerebrovascular disease	2,232	11.3
4.	Accidents	1,151	5.8
5.	Influenza and Pneumonia	818	4.1
6.	Bronchitis, emphysema and asthma	432	2.2
7.	Certain causes of mortality in early infancy	376	1.9
8.	Arteriosclerosis	304	1.5
9.	Diabetes Mellitus	300	1.5
10.	Suicide	204	1.0
	All other causes	3,213	16.3

Two significant comparisons can be made from the leading causes of death in West Virginia and the leading causes of death in the United States.

Representatives of the West Virginia Regional Medical Program met with the State Medical Association's Committee on Medical Education and Hospitals at a session in Charleston on November 15. Pictured above, left to right, are Mr. William G. Copper of South Charleston, RMP's Charleston Area Liaison Officer; Dr. Daniel Hamaty and Dr. P. A. Tuckwiller, both of Charleston and Vice Chairman and Chairman, respectively, of the Committee on Medical Education; and Dr. Thomas Covey, Assistant Professor of Surgery at the West Virginia University School of Medicine in Morgantown. Doctor Covey also has part-time duties with the RMP staff housed at WVU, and is developing a "visiting professor" program designed to make specialists on the WVU Medical Center staff available to physicians in various parts of the state for short periods of consultation and review of "problem" cases the physicians might want to present.

Suicide, the 10th leading cause in West Virginia, does not appear among the leading causes in the United States. The sixth leading cause of death in West Virginia is bronchitis, emphysema and asthma, while these diseases rank ninth for the United States.

Illegitimacy has been on the rise in both West Virginia and the United States. From 1945 to 1965, West Virginia's illegitimacy rate was above the national rate. In 1969, 1,997 illegitimate resident births were recorded—8.8 percent of all births. This high level has persisted in West Virginia despite the fact that West Virginia has a proportionately smaller non-white population than the national average, and despite the fact that reported illegitimacy rates are much higher for non-white.

According to Doctor Dyer, certain items recorded on birth, fetal death and death certificates for the first time in 1968 revealed interesting and useful information. New items on live birth and fetal death certificates show that color, legitimacy and mother's education have an effect upon the time prenatal care is sought. White mothers are more likely to get prenatal care sooner, as are mothers carrying legitimate children and mothers with higher levels of education. In 1969, the fetal death rate for mothers having no prenatal care was 8.3 per 1,000 population, while the live birth rate for the same group was 2.3.

Information on autopsy status was recorded on death certificates in 1968. Figures for 1969 show that males are autopsied more frequently than females. They also indicate that if an individual dies in a hospital, he is more likely to be autopsied than if he dies elsewhere.

Following established tradition, the 15th Potomac-Shenandoah Valley Postgraduate Institute provided a long list of outstanding speakers and papers at its October sessions in Martinsburg. Here, left to right, are four of the faculty: Dr. Emmanuel L. Bravo, a staff member of the Cleveland Clinic's Clinical Research Division who spoke on "Clinical Approach to Patient with Hypertension and Hypokalemia;" Dr. Raymond C. V. Robinson, Associate Professor of Dermatology, University of Maryland School of Medicine, who discussed "Diseases of the Hair;" Dr. Louis K. Alpert, Clinical Professor and Director of Chemotherapy of Research, George Washington School of Medicine in Washington, D. C., whose topic was "Chemotherapy of Cancer," and Dr. John J. Canary, Professor of Medicine and Head of the Department of Endocrinology and Metabolic Diseases, Georgetown University School of Medicine, Washington, D. C., who spoke on "Calcium Problems in Chronic Renal Disease."

AMA Vice President Visits Kanawha Medical Groups

Dr. Ernest B. Howard, Executive Vice President of the American Medical Association with offices in Chicago, addressed the monthly meeting of the Kanawha Medical Society at Charleston's Daniel Boone Hotel on Tuesday evening, December 8.

Doctor Howard also spoke at Charleston Memorial Hospital on Tuesday afternoon, and at Thomas Memorial Hospital in South Charleston on Wednesday morning, December 9.

The AMA official covered a variety of topics, including several which were the subject of resolutions or other attention at the AMA Clinical Convention November 29-December 2 in Boston, Massachusetts. He then participated in a question-and-answer session.

During its business session the Kanawha Society elected Dr. W. Alva Deardorff of Charleston as its President, to succeed Dr. George V. Hamrick. Dr. Jimmie L. Mangus of Charleston was elected Vice President, and Dr. George W. Hogshead of Nitro was chosen as Secretary-Treasurer.

Doctor Scherr Gives Paper

Dr. Merle Scherr, Chief of the Allergy Clinic at Memorial Hospital in Charleston, spoke on "Allergic Pulmonary Diseases" at a December 2 Symposium on Care of Respiratory Diseases at Sacred Heart Hospital in Cumberland, Maryland.

College of Preventive Medicine Expands Requirements

Fellowship requirements of the American College of Preventive Medicine, heretofore limited to those certified by the American Board of Preventive Medicine, have been expanded to admit physicians engaged full time in practice, teaching or research in the field of preventive medicine who are Board certified in areas other than preventive medicine.

A bylaws amendment effecting the change was approved unanimously at the College's 17th Annual Meeting in Houston, Texas, October 29.

President Katharine Boucot Sturgis, M. D., of Wynnewood, Pennsylvania, announcing the change, said, "This will greatly broaden the scope of the College Fellowship, especially in academic circles where many physicians Board certified in such fields as Pediatrics and Internal Medicine have lifted their horizons to appreciate the need to prevent illness, promote health and apply the results of research."

U. S. Senate Panel Urges New Cancer Crusade

A special panel of U. S. Senate consultants has urged a multi-billion dollar crusade against cancer to erase its "staggering" impact of death and suffering on all mankind.

In a brief but detailed report to the Senate Labor and Public Welfare Committee on its four-month study of the disease, the 26-member panel estimated that 50 million Americans now living will develop the disease, and that 34 million of them will die unless immediate steps are taken to curb it.

The consultants recommended a sweeping program keyed to consolidation of all existing cancer research projects into a National Cancer Authority directly responsible to the President.

"The Committee is unanimously of the view that the conquest of cancer is a realistic goal if an effective national program along the lines in the report is promptly initiated and relentlessly pursued," said Benno C. Schmidt, Co-Chairman of the group.

"Given the seriousness of the cancer problem to the health and morale of our society, this allocation of national priorities seems to be open to serious question," the panel said.

It recommended a doubling of cancer research spending to $400 million in the 1972 fiscal year, and increasing it by $100 million to $150 million in subsequent years to a $1 billion level in 1976.

The panel said its recommended program "is so important to the American people and to the world" that the money should be spent even if taxes have to be raised to pay the bill.

The panel of consultants, made up of labor and civic leaders as well as distinguished cancer re-

(Continued on Page 24)

AMA Official Sees Continued Health Care Problems

An American Medical Association executive has asserted that if the nation's medical manpower shortage should end tomorrow, many of our major health problems would still exist.

Dr. William Ruhe, AMA Director of Medical Education, put it this way:

"Turning out more doctors and allied health workers will not solve the problems of poverty, the distribution of our people, and poor nutrition due to ignorance, poverty and often affluence."

He explained:

"Many of this nation's health problems are related to the affluence that is responsible, to an extent, for heart disease, mental disease and the 56,000 deaths caused on our highways annually.

". . . And all these problems are beyond the health care delivery system no matter how many physicians are available."

Doctor Ruhe spoke at the Health Insurance Council's recent conference on effective utilization of health care facilities and services held in Chicago, Illinois.

The Health Insurance Council is supported by the nation's insurance companies, and provides technical assistance on health insurance to the health care professions.

At the same Chicago conference, one of the nation's leading educators urged American medical schools and others concerned with producing health manpower to shift their emphasis to preventive care as a means of bringing the country's health crisis under control.

Joseph Gallagher, M. D., Assistant Vice Chancellor for Health Programs, University of Texas System, said that the nation's health systems will not be able to deliver adequate services to the overall population, "no matter how much we increase the health manpower," because of misdirected priorities.

"Our present health systems are based primarily on the premise that a person enters the systems only if he or she is sick or injured," he said. "Waiting for a person to get sick or injured before he seeks assistance from our health system, or before he can be admitted into the system, is not barbaric, but it also is not consistent with our accomplishments as a nation.

"If we pursue our episodic illness pattern as the sine qua non in the delivery of health services, we won't be able to afford it."

Doctor Gallagher urged the health professions educational systems and those providing health services to orient their work toward activities which would avoid "spending gigantic sums of money to educate greater and greater numbers of students to lock us deeper and deeper into our present delivery methods."

Among the measures Doctor Gallagher advocated were:

— Maximum use of preventive measures.

— Identification of areas requiring preventive know-how to enable the nation's research capability to focus on it.

— Exploitation of the educational system and the communication media to educate people in preventive health practices, "instead of exclusively emphasizing the glory of hospital medicine, particularly in the sterile whiteness of surgery."

Increasing emphasis toward preventive health, he said, "would set into motion a method for decreasing episodic illness, even injury" and would be "over the long haul far less costly."

Looking Back 10 Years . . .

Members of the State Medical Association's Rural Health Committee of 10 years ago prepare to enjoy a luncheon during a meeting in Sutton. Left to right: Dr. O. M. Harper of Clendenin; Dr. John W. Trenton of Kingwood; Dr. Charles E. Staats of Charleston, Chairman; the late Dr. S. C. Dotson, Jr., of Morgantown; Dr. J. M. Brand of Chester; and Dr. R. W. Cronlund of Philippi.

Lecturers, Speakers Named For Cleveland Courses

The Cleveland Clinic Educational Foundation has announced the following list of guest lecturers and speakers for a postgraduate medical education course in "Orthopaedic Challenges—Reconstructive and Post Traumatic" to be offered on January 20 and 21:

Dr. Robert A. Murray, Chairman, Department of Orthopaedic Surgery, Scott and White Clinic, Temple, Texas; Dr. Arthur M. Pappas, Orthopaedic Surgeon-in-Chief, Boston Children's Hospital, Boston, Massachusetts.

Dr. Victor H. Frankel, Department of Orthopaedic Surgery, University Hospitals of Cleveland; Dr. Barry Friedman, Department of Orthopaedic Surgery, Mt. Sinai Hospital in Cleveland; Dr. Avrum Froimson, Department of Orthopaedic Surgery, St. Luke's Hospital, Cleveland, and Dr. Frederic W. Rhinelander, Department of Orthopaedic Surgery, Cleveland Metropolitan General Hospital.

The medical guest faculty for a January 27 and 28 postgraduate course in "Complications of Angiography and Other Special Procedures and Their Legal Implications" will include:

Dr. Stanley Baum, Professor of Radiology at the University of Pennsylvania School of Medicine in Philadelphia; Dr. Joseph J. Bookstein, Professor of Radiology at the University of Michigan in Ann Arbor, and Dr. E. Ralph Heinz, Professor and Chairman of the University of Pittsburgh Department of Radiology.

The Cleveland Clinic Educational Foundation also has scheduled a postgraduate continuation course in "General Practice" for February 3 and 4.

The registration fee for each of the courses to be offered in January is $60, with a $45 fee for the general practice course.

Additional information and program details may be obtained by writing to: Director of Medical Education, The Cleveland Clinic Educational Foundation, 2020 East 93rd Street, Cleveland, Ohio 44106.

SENATE PANEL—(Continued from Page 22)

searchers, said that the program should be devoted primarily to research into the causes and cures of cancer, rather than to patient care.

The panel said that the cost of cancer has been estimated "as high as $15 billion per year," of which as much as $5 billion is spent on caring for patients. The balance is in the loss of earning power and productivity.

It said that only 89 cents was spent last year for each man, woman and child in the United States on cancer research, compared with $140 per capita on national defense, $125 for the Vietnam war and $19 each on space programs and foreign aid.

Medical Meetings

The following is a partial list of national, state and district medical meetings scheduled in the coming months.

1971

Jan. 6-9—Am. Rheumatism Assn., Washington.
Jan. 18-20—Soc. of Thoracic Surg., Dallas.
Jan. 31—4th Mid-Winter Conf. on Chest Diseases, Charleston.

Feb. 3-7—Am. Col. of Cardiology, Washington.
Feb. 20-24—Am. Acad. of Allergy, Chicago.
Feb. 20-27—Am. Soc. of Clin. Path. & Col. of Am. Path., Las Vegas.

March 6-11—Am. Acad. of Orth. Surg., San Francisco.
March 14-18—Am. Col. of Allergists, San Francisco.
March 26-28—Am. Soc. of Int. Med., Denver.
March 28-April 2—ACP, Denver.
March 29-April 3—Am. Col. of Rad., St. Louis.

April 14-17—W. Va. Acad. of Oph. and Otol., White Sulphur Springs.
April 18-22—Am. Assn. of Neu. Surg., Houston.
April 24-25—W. Va. Conf. on Med. Educ., Charleston.
April 26—May 1—Am. Acad. of Neurology, New York.
April 26-28—Am. Assn. for Thoracic Surg., Atlanta.
April 28-May 1—W. Va. Chap., ACS, White Sulphur Springs.
April 29—May 1—Am. Ped. Soc., Atlantic City.
April 29-May 2—W. Va. Chap., AAGP, Wheeling.

May 1-5—Am. Psy. Assn., Washington.
May 3-7—Am. Col. of Ob. & Gyn., San Francisco.
May 10-14—Ohio Medical, Columbus.
May 16-19—Am. Thoracic Soc., Los Angeles.
May 16-20—Am. Derm. Assn., Sky Top, Pa.
May 16-20—Am. Urol. Assn., Chicago.

June 17-18—Am. Rheumatism Assn., New York.
June 20-24—AMA, Atlantic City.
June 22-23—Am. Diabetes Assn., San Francisco.

Aug. 19-21—104th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.
Aug. 23-26—Am. Hosp. Assn., Chicago.

Sept. 9-11—Am. Assn. of Ob.-Gyn., Hot Springs, Va.
Sept. 13-17—Int. Conf. on Coal Workers Pneumoconiosis, New York City.
Sept. 20-24—Am. Acad. of Oph. and Otol., Las Vegas.
Sept. 21-23—Ky. Medical, Louisville.

Oct. 1-8—AAGP, Miami Beach.
Oct. 16-21—Am. Acad. of Ped., Chicago.
Oct. 16-20—Am. Soc. of Anes., Atlanta.
Oct. 18-22—ACS, Atlantic City.
Oct. 24-28—Am. Col. of Chest Phys., Philadelphia.

Nov. 3-6—Am. Soc. of Cyt., Washington.
Nov. 9-16—Am. Heart Assn., Anaheim, Calif.
Nov. 28-Dec. 1—AMA Clinical, New Orleans.

Dec. 4-9—Am. Acad. of Derm., Chicago.
Dec. 5-7—Am. Acad. of Hema., San Francisco.

1972

Jan. 24-26—Soc. of Thoracic Surg., San Francisco.

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Impotence and Frigidity: An Overview*

Perry C. Talkington, M. D.

Throughout recorded history people have felt the need to perform sexually, in order to fulfill their procreative instinct and, by homeopathic magic, to insure the fertility of the earth. Primitive man associated the power of procreation with the phallus, and the worship of the phallus and the union of the sexes became an important element in all fertility rituals.[1,5] These early rituals were then incorporated in the primitive religions as a way of bringing about the fruitfulness of the earth. Because of elemental and irrevocable biological differences between the sexes, woman could passively make her contribution to race preservation and homeopathic magic, but the sexual success or failure of the male was highly visible.

The predominantly male concern about impotence is universal. Phallic carvings, large and small, dating as far back as the Stone and Bronze ages and found in the most remote parts of the globe, attest to this concern. It is revealed in the earliest literature and art. There was almost no mention of frigidity, however, until about 100 years ago. The burden of man's responsibility in the sexual act weighed heavily upon him; woman's burden was less fearful. It was necessary for man to believe that various foods and drugs would induce or enhance potency. Thus, aphrodisiacs and magic symbols have been used throughout the ages to insure potency. In earlier civilizations, the spike of the norwhal was powdered and sold as the horn of the mythical unicorn to increase potency. In the East and Middle East rhinoceros horn is today sold illegally as a cure for impotence.[13] Recently, a Swede is said to have sold ten tons of reindeer antlers in Korea at $1.00 a pound, and is holding orders for five more tons.[7] These are used by interested persons to strengthen potency and increase virility.

The Author

- **Perry C. Talkington, M. D., Clinical Professor of Psychiatry, University of Texas Southwestern Medical School, Dallas, Texas.**

The patterns of sexual interaction between the male and female have varied considerably from age to age, from culture to culture, and from individual to individual.[2,22] The role of the female in the sexual act has been dictated not only by her biological role but also by prevailing social, cultural, and religious doctrines. The ancients seem to have accepted sexual activity as a natural function. The early Greek, Roman, Byzantine and Oriental cultures regarded woman's part in sexual activities as both active and important. And in those cultures where women were allowed full sexual freedom, they were evidently as sexually inclined as men. Impotence is old. Frigidity may be new.

In the traditional patriarchal family system of early times, man developed the dual standard of sexual activity. Aware of the fact that his wife had equal sex drive, he wanted to make sure his offspring were his own and took various measures to insure this while he was away at war, hunting or working in the fields. Early Teutonic tribesmen, in obeisance to the sexual drive of woman, said, "One does not leave one's gold or one's wife on the street." The knights of Medieval times locked chastity belts on their wives before they left for the Crusades.

In Western civilization the early Judeo-Christian and Puritan moral concepts seem to have been the first to give currency to the idea

*Presented at the Second General Scientific Session during the 103rd Annual Meeting of the West Virginia State Medical Association, The Greenbrier, White Sulphur Springs, August 21, 1970.

that sex was shameful and sinful, except for the purposes of procreation or to satisfy man's sexual needs. The early literature is replete with examples of woman as a temptress and of early prophets who lived in the desert, ate wild honey and locusts, and wore hair shirts and chains to avoid the temptation of women, who were arbitrarily evil and had the power of bewitching a man.

During the Victorian age of Western civilization, man divested himself of the magical concept that his sexual performance was responsible for the fertility of the earth and all living things. He also avoided the anxieties involved in satisfying an equally aggressive partner. Sexual repression became the order of the day. The conventional attitude was that no decent woman could be sexually aroused—or if she could be, she should not admit it. Sex was never discussed in polite circles. Children were impressed with a frightening awareness that sexual feelings and impulses were to be repressed, or at least hidden. In the polite ladies' seminaries, not even the grand pianos had legs, they had limbs, which were covered with multipetticoats for modesty's sake.[15]

A number of vectors influencing sexual patterns and feelings seem to be unique to North America, especially the United States. This was a new frontier and a man's world. Women were scarce and therefore precious. The ancient dual sex standard was retained. Women were deprived of the right to work or own property. There were "good" women and "bad" women, and good women did not enjoy sex. Wives were arbitrarily "good" and, moreover, the concept that one does not have sexual intercourse with a member of the family, which included the wife, was an influencing factor.

Women became restive under this role and slowly began to change the entire pattern and tenor of life. In 1920, the Woman's Suffrage Bill was enacted, the United States had become an urban social organization, and what is now called the "Sexual Revolution" began in earnest. Woman's new-found freedom included the right to work, in many states the right to own property even though married, and the "Flapper Age" began. So, today, women no longer function simply as wife and mother. Now, 30 per cent of the labor force are women, and 30 per cent of married women work. This divisive role sponsors many sexual conflicts for the American woman.

Behavioral Patterns Altered

Changing social mores and values and the advent of the "pill" have radically altered the sexual ethos and patterns of sexual behavior. Instead of repressing sex, we have become almost obsessed with it. A great deal more sexual freedom is accepted today than ever before in our society—especially by the younger generation. This freedom itself seems to have created more anxiety and more sexual problems in both sexes. According to Kierkegaard, "The price of freedom is anxiety," and anxiety can produce impotence and frigidity. The competitiveness with which sex seems to be imbued today, in some cases, fosters extreme forms of anxiety and hostility.

Today, there is much emphasis on the mechanics of sexual intercourse. The literature, especially the lay literature, presents vivid and detailed descriptions of various kinds of sexual activity. In the "how-to-do-it" sex manuals, the physical techniques and the acrobatics of sexual intercourse are highly stressed. It is now suggested that emphasis beyond a certain point on the technique of the sexual act, makes for a mechanistic attitude toward love-making, and goes along with alienation, feelings of loneliness, and depersonalization—and these feelings make for frigidity as well as impotence in marital sex relations.[14] The emphasis on the orgasm, particularly vaginal orgasm, as a sexual status symbol and on simultaneous climax as the primary goal of sexual intercourse produces great demands and concern. Preoccupation with the measure of success and how to achieve it intensifies anxiety in both parties, raises the question of how well one performs in comparison with others. The emphasis on individual performance mitigates toward impotence.

The total impact of advertising in the mass media, the modern novel, movies, plays, magazines and casual conversation gives currency to the concept that woman not only has equal sex rights with man, but that superb performance is now also demanded of her. Some of the burden of anxiety in regard to performance has now been shifted to her shoulders. The specter of failure to achieve simultaneous climax with her husband haunts her. She measures herself and her sexual abilities by the yardstick delineated in the mass media—and perhaps her husband measures her by the same yardstick.

Definitions

Impotence, or sexual dysfunction or inadequacy in the male, is the inability to obtain and maintain an erection sufficient for satisfactory completion of the sexual act. Here we are referring to heterosexual marital relations, although there is also impotence in homosexual relations. Impotence can be divided into two

major categories: (1) primary impotence (the male's lifelong inability to achieve vaginal penetration) and (2) secondary impotence (applied to males who have functioned at some level of sex capacity with the opposite sex).

Frigidity is an inappropriate term because no one knows exactly what it means. Literally, it means sexual coldness or total unresponsiveness in the sexual act, which is extremely rare. It is applied, however, to a multiplicity of sexual difficulties in the female—ranging from those who abhor or are repulsed by and avoid sexual relations through the nonorgasmic woman to the woman who is able to achieve orgasm only part of the time.[4,10,12,13] It may refer to any level of sexual response considered unsatisfactory by either partner on any particular occasion. It has been applied even to women with multiorgasmic responses.[21] Perhaps it is more appropriate to apply the term "frigidity" to total disinclination for sex activity and the absence of any sexual response.

Organic Factors

Organic causes of impotence[8] may include congenital defects, lesions in various parts of the central nervous system or urogenital tract, and various endocrine disorders. Prostatitis may result in a loss of libido, or impotence. The relationship between diabetes and impotence is well documented. Chronic debilitating or crippling physical illnesses, major surgery, serious injuries such as the loss of a limb, or myocardial infarction may lead to some degree of impotence. Extreme mental or physical fatigue can produce temporary impotence. Any of these conditions may leave emotional repercussions of various degrees of severity that affect sexual performance.

Sexual dysfunction in the female may be caused by vaginismus, dyspareunia, infection or inflammation of the clitoris, cervix, ovaries, or other accessory organs. It is almost universally accepted, however, that frigidity and related sexual difficulties in the female are psychogenic in nature rather than physiological or organic.[4]

Ontogenic Factors

Ontogenic factors in the early development of the individual also may play a significant part in the etiology of frigidity and impotence.[11,16]

There is much evidence that the transition from the third to the fourth month of life is one of the critical periods in psychosexual development. The infant, at that age, is absolutely dependent. If, by the fourth month, the infant cannot like and trust the people upon whom it is dependent, and feel all right about being dependent, then it may become autistic, sociopathic, or schizophrenic, with resultant sexual dysfunction.

When parents leave an 8-month-old child it becomes anxious, apprehensive, upset, disturbed. It must somehow learn that it is loved and not abandoned, even if the parents are not there. Otherwise, the child grows up to avoid close personal attachments for fear of abandonment.

The fourth year of life seems to be the time of "imprinting" in the human animal. Divorce or the loss of a parent at this age—death being the ultimate form of rejection—may prevent the development of easy social interactions and of good heterosexual relationships.

The small child brings its most valuable commodity—its love—to the parent. If met with hostility, rejection, or neglect, its feeling is: "My love is worthless. Therefore, I am worthless." This concept of self is carried into other interpersonal relations, including the marital relationship: "If even a parent cannot love me, certainly no one else could."

There is also the question of the development of homosexuality or latent homosexuality in the maturational process. Time prevents going into this complex phenomenon. Its existence, however, produces impotence or frigidity with members of the opposite sex.

Alcohol and Impotence

A large amount of alcohol has a great deterrent effect on sexual performance. The emotional factors which result in chronic alcoholism may or may not produce impotence: alcoholism does produce impotence.[13,18] Perhaps all heavy drinkers have some degree of impotence. The evidence is that there is much hidden alcoholism in patients who complain of impotence. This may be one of the most frequently missed points in the diagnostic history.

Drugs and Impotence

Some of the psychotropic drugs, barbiturates and major tranquilizers can produce sexual weakness as a side-effect. There is some correlation between extensive drug abuse and degrees of impotence.[18] This is especially true in adolescent and young adult drug users. One author states that impotence is frequently seen in young heroin addicts, and that he has found that some degree of sexual difficulty usually preceded the addiction.[13] Not sure of his identity, doubtful of his masculinity and his sexual ability and perhaps bored with or disinterested in sex, the young person may take drugs in order to have

the "feelings" and sensations of orgasms without having to bother with the anxieties of sexual intercourse or of warm interpersonal relationships.

Psychological Factors of Impotence

Anxiety probably plays a significant part in every case of impotence. It may be brought about by the stress of life, work, adjustments to a new job or promotion, loss of a job or demotion, any number of frustrating life experiences and, perhaps most important, any sign of sexual inadequacy or difficulty. Failure to function satisfactorily in the sex act can become the major cause of impotence. The simple question "How am I going to make out this time?" can be fatal.

Impotence can be the result of the male's concern about the myth of the inevitable loss of sexual potency and virility with the process of aging. Extensive studies indicate, however, that humans can remain sexually active into the ninth decade, given a history of active sexual expression through the earlier years, reasonably good health, and availability of a healthy and willing sexual partner.[9,12,17] The idea of the early loss of sexual ability is gradually being overcome, but it can wreak havoc in the sex life of middle-aged males who give credence to it.

Impotence is frequently a symptom of underlying hostility toward women in general, or only toward a certain female. Regardless of its cause, conscious or unconscious elements of hostility can manifest themselves in the form of impotence.

Sexual dysfunction or inadequacy in the male may be due to unresolved Oedipal conflicts. An aggressive, dominant, outspoken wife may awaken old feelings of helplessness, of castration, and of resentment toward an overprotective, possessive, and domineering mother. As one author points out, "It is reasonable to presume that every situation of psychological castration must involve both a castrating woman and a castratable man."[6]

The act of sexual intercourse in marital relations may be an act of love or an act of aggression or both simultaneously. It can be a means of expressing feelings which have nothing to do with the sexual act itself. Impotence is one way a passive man has of showing indirect aggression to his marital partner. Premature ejaculation is frequently seen in a hostile relationship between a man and his wife, although it can also be brought about by anxiety.

As mentioned earlier, to some men there are "good" women and "bad" women. Frequently in marriages where the couple had successful premarital sexual relations, difficulty begins only after the marriage ceremony is performed. The marriage symbolizes the fact that the female is now a "good" woman, and consequently forbidden as a sex partner. In some cases, for the husband to be potent with his wife, he must first somehow conceive of her as a prostitute.

The impotence of depression is probably most commonly seen by the internist and general practitioner. It is difficult to pinpoint, for depression itself may be masked or expressed somatically through headaches, backaches, abdominal distress and, quite commonly, by impotence.[3] The patient feels that he is depressed because he is impotent. It may well be that he is impotent because he is depressed.

Feelings of guilt and sin about sexual intercourse can be a strong inhibiting factor in marital sexual relations. The shaping of an individual's morality in early years and his emotional and religious conditioning in regard to sex can be important elements in potentiating sexual inadequacy in marital sex relations. If for twenty years, a child is taught that sex is dirty, sinful, shameful, carnal, vulgar, the marriage ceremony doesn't always remove the taboo.

A rather common psychological factor connected with male potency has to do with proper role identification. An amorphous, uncrystallized, plastic identity almost always produces psychic conflicts that cause some degree of impotence. The young boy growing up without proper male models that allow for his own identification as a potent male often becomes impotent either early or later in life. There is some evidence that we are now seeing much more impotence in younger males than was seen ten years ago.[13] This may be due to the fact that patriarchal sources of his masculine identity are confused, weakened, or disappearing altogether, and the pressure involved in role confusion may affect all aspects of his relationship with the opposite sex and not just the sexual act.

Psychological Factors of Frigidity

Woman is more complex than man, both physically and emotionally. Her whole reproductive system is much more complex than the male's. In many ways she is better equipped biologically to fulfill her role. She has a more labile nervous system and a more responsive autonomic system.[19] There are innate constitutional differences in women but the category of emotional disinterest in the sexual act is probably far more significant in the female than in the male. Recent studies and extensive re-

search are helping to clarify many hitherto clouded and confused ideas about female sexuality.[10,12,17] We still know relatively little, however, about the etiology of frigidity and related sexual difficulties in the female.

Temporary frigidity may result from a wide range of conscious and unconscious factors, emotional, environmental, physical, or combinations thereof. It can result from fear, anxiety, emotional conflicts, aggression, hostility, any number of past experiences, the present situation, or anything except what the term "frigidity" implies. All the psychological factors involved in male impotence can, with obvious modifications, inhibit sexual responsiveness and arousal in the female and prevent full and complete sexual satisfaction.

Perhaps the greatest inhibiting factors can be influences of social, religious and environmental conditioning. In spite of the current sexual revolution, many women cannot free themselves from the feelings of disgust about sex their parents cultivated in order to protect their chastity. Old habits of thinking, acting, and feeling are virtually, but not quite, impossible to change. A woman brought up in the context of sexual repression frequently is unable to respond to her husband because of the intrusion of these fantasied or unconscious prohibitions of sexual response and drive.

Obsessive-compulsive frigidity is based on deep-seated psychopathological factors, and may be associated with a morbid fear of dirt, filth, germs and the like. Some react with hysterical paralysis (this is now rare), nausea, vomiting, or by complete withdrawal. These types of sexual dysfunction may respond, if they respond at all, to long-time intensive psychotherapy, which may be equally frustrating to the physician and the patient.

Women who actually dislike the idea of sexual intercourse, for whatever reason, and who have no desire to achieve any level of sexual satisfaction, are psychosexually impaired. The husband may never realize this, because the woman, if she is at all knowledgeable and really loves her husband but not sex, may pretend sexual arousal and intense feelings where none exist, in order to please him.

The overly dominant, excessively strong or seductive father may make quite an impact on his daughter during the developmental stages of her life. She may identify all men, particularly her husband, with her father. This identification may inhibit her sexual responsiveness to her husband, and render her frigid.

Women sometimes use sex as a weapon in marriage. Sex is given or withheld as a way of dominating and controlling the marital relationship. The woman who uses sex as a controlling tool is not necessarily frigid.

A small percentage of women see themselves as infants, and want to be cared for as infants by a wise, kindly, fatherly husband, who gives all and asks nothing in return. Whereas other women are in agreement that the husband should be more of a "man." For instance, many women say, "I have four children—Mary, Joseph, and Johnny—but then, of course, there's my husband."

There are other temporary or situational conditions that may be associated with frigidity, such as a lack of privacy, distractions about planning a party, the oldest daughter out too late, a rebellious young son, concern about finances, or a visiting mother-in-law in the next bedroom. Difficulty in sexual relations may be based on the husband's rudely aggressive approach to the sexual act, the idea that the male should be the only sexually aggressive partner, and the feeling that "he is not really interested in me, he is only interested in sex."

Traumatic physical conditions can lead to some degree of temporary frigidity. In such cases the woman has responded well sexually but at a certain point ceases to do so. This type of situation usually follows parturition, a D&C, hysterectomy, mastectomy, or oophorectomy, which results in a change of her bodily image and creates the feeling that she is less attractive and less a woman.

Practically none of the conditions outlined here would indicate that frigidity, in its true sense, exists. Therefore, the term "frigidity" should be used sparingly, if at all, as a diagnostic term. It has been suggested that the term "sexual impairment" or "sexual dysfunction" is more applicable.

Diagnosis and Treatment

Diagnosis is primarily on the basis of history and a complete physical examination. A very careful history should be obtained, particularly regarding the individual's level of sexual knowledge and adjustment and the presenting symptoms of the current situation. It is important to know something about the patient's early history, parental relationships, family attitudes toward sex, his position in relation to siblings, childhood experiments with sex, and early experiences of sexual intercourse. At this point of history-taking both the patient and the physician must be comfortable and at ease with each other, and

channels of communication must be kept open. The physician can lead the patient into discussing what the patient feels is most significant in his particular case. By this process, the patient may provide some of the answers to important questions indirectly.

If the problem is impotence, the physician needs to know: When the patient first noticed any degree of sexual weakness; whether the onset was gradual or sudden; at what stage in intercourse erections fail; about the state of erection at various times and in different situations, premature ejaculations, nocturnal erections, successful erections during masturbation (successful erections during masturbation would rule out any organic cause), masturbatory fantasies, dreams, et cetera; whether there are any special feelings (guilt, fears, anxiety, hostility) that might inhibit ability to perform; whether the patient is concerned about his own ability or his partner's ability to perform; about alcoholic intake and use of drugs, prescription or otherwise.

The fundamental therapeutic approach will depend on the dynamics of the presenting case and the physician's viewpoint, experience, and mode of approach. The history, physical and neurological examinations are the first steps in psychotherapy and in the establishment of rapport. If the problem has an organic basis, it is still a two-faceted problem, organic *and* psychic, and it is extremely important for the physician to treat the emotional aspects as well as the organic. Do treat the diabetes. If the presenting problem is entirely psychosexual the physician needs to be sure of his own ground and attitude of approach and be able to keep the patient exploring with him in order to open up dark recesses and shed new light.

In some simple, temporary cases of impotence and frigidity, the focus of the treatment process may become primarily an exploration of the marital relationships and the current life situation, and may include supportive, educational and reconditioning techniques. The problem may prove to be simple and self-limiting, require conferences with the marital partner and, in some cases, physician confrontation to point out distasteful personal habits and attitudes. In some instances, it may be necessary to manipulate marital attitudes and improve communication between the two.

There are many potential factors which may be involved in marital sexual maladjustment, and one of these is ignorance about the sexual relationship. The physician must seize the opportunity of gently exploding myths, misinformation, and doubts associated with sexual activity.

Cases of impotence or frigidity based on lifelong anxiety, fears of rejection, fear of closeness and warm interpersonal relationships, and those based on deeply buried and complex psychic conflicts, deep-seated anger, hostility, and the compulsive-obsessive should be referred to a psychiatrist—and even his batting average will be low. Impotence or frigidity due to homosexuality probably will not be amenable to treatment.

Depression

The incidence of depression, in all its shadings of depth, is more universal than generally recognized. The mortality rate among this type of patient is extraordinarily high. Here by all means the physician should forget impotence and frigidity and treat the depression. If there is any doubt as to the degree of depression, he should not hesitate to refer the patient to a psychiatric hospital.

The Knowledge Gap

It is unfortunate, but true, that there still are gaps in our knowledge of sexual physiology and the psychological elements associated with sexual difficulties. It has been stated repeatedly by Lief and others that very little is taught in most medical schools about sexual adjustment and maladjustment. The practicing physician may also be inhibited by his own attitudes and moral values and embarrassed when talking about sex.

Current work indicates that the treatment of sexual inadequacy in marital relations should, if at all possible, include both partners.[12,17,20] This problem is the province of the physician. It is estimated, however, that 75 per cent of the problem is treated by the psychologist, the social worker, the minister, the lawyer and lay persons.[17]

As a profession we are oriented toward success. The treatment of impotence and frigidity is not always easy. It is time-consuming, and the results may be disappointing. The psychodynamics vary from case to case. As physicians, however, we must keep abreast of all the research being done in this field, whether in the area of conditioning, reeducation, behavior, or other new concepts of approach, and apply our still limited but increasing knowledge to each patient on an individual basis.

A list of references may be obtained by writing The Journal.

Emergence of Drug Resistant Organisms In Pulmonary Tuberculosis

Young E. Chun, M. D., and C. H. Joseph Chang, M. D.

MYCOBACTERIAL resistance occurring in the course of treatment of tuberculosis has been investigated extensively.[1-5] The object of this study was to examine the clinical features which may influence the presence or absence of mycobacterial susceptibility in cases of relapse; the time of bacterial conversion during initial treatment; the interval of time between the completion of chemotherapy and relapse; the number and size of cavities at the beginning of treatment; and the loss of organism susceptibility during initial treatment.

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Materials and Methods

The records of 863 male patients with pulmonary tuberculosis whose ages ranged from 20-71 years, and who were admitted to the Veterans Administration Hospital, Baltimore, Maryland, consecutively over a two-year period (1965-1966), were reviewed. All of these patients were treated with combined chemotherapy.

Relapse is defined as the isolation of tubercle bacilli by culture of at least two consecutive monthly sputum specimens after at least three monthly consecutive negative cultures. The criteria adopted for the recognition of drug resistance were: strains growing in 2.5 micrograms of Streptomycin (SM), 1.0 microgram of Isoniazid (INH), 5.0 micrograms of para-aminosalicylic acid (PAS) per milliliter of medium (accepting 20 or more colonies as evidence of growth).

Results

Of the 863 patients, there was relapse of the tuberculosis in 132. Of the 132, 86 patients had organisms which were resistant to one or more of the three primary drugs, and in 46 cases the organisms were still susceptible. There was failure of sputum conversion in 34 of the 863 cases and, eventually, drug resistant organisms were identified in all (treatment failure, Table 1). The group of 166 cases (86 cases of relapse with resistant organisms, 46 cases of relapse with susceptible organisms and 34 cases of treatment failure) were studied in detail.

Of the 166 patients, the disease was far advanced in 100, moderately advanced in 58, and minimal in eight. The disease was far advanced in 24 of 34 treatment failures (70.6 per cent), 58 of 86 cases of relapse with drug resistant organisms (67.4 per cent), and 18 of 46 cases of relapse with drug susceptible organisms (39 per cent). Cavitation was present in 27 of 34 patients whose treatment failed (79 per cent), 63 of the 86 whose active disease represented relapse with resistant organisms (73 per cent), and 23 of 46 whose disease had also relapsed but whose bacilli were still susceptible (50 per cent). Of the remaining 697 cases (863-166) in which there was no relapse, cavitary disease was present in 439 (63 per cent).

A comparison was made between 27 cases with cavitation among a total of 34 treatment failures, and 525 cases of cavitation (86 cases of cavitation among a total of 132 relapsed cases, and 439 cases with cavitation among a total of 697 cases in which there was no relapse); and there was no statistically significant correlation between the presence of cavitation and treatment failure ($X^2 = 3.0$, $P>0.05$).

Again, a comparison between 86 cases with cavitation among a total of 132 relapsed cases, and 439 cases with cavitation among a total of 697 cases in which there was no relapse, disclosed no statistically significant correlation between the presence of cavitation and relapse ($X^2 = 0.14$, $P>0.5$). In Table 2, the characteristics of the patients whose bacilli were resistant (86), and those in whom susceptibility was maintained (46) are outlined.

The duration of treatment before sputum conversion averaged 4.5 months for those resistant to the primary drugs, and 4.3 months for those whose organisms were susceptible. The average

duration of chemotherapy of the two groups was 12 and 17 months respectively. The relation of organism susceptibility to the duration of treatment in the 132 cases of relapse is demonstrated in Table 3. Duration of original chemotherapy failed to correlate closely with the development of drug resistance ($X^2_{(2)} = 2.98$, $P>0.2$). Among the 86 patients with resistant organisms, chemotherapy had been continued without interruption in 46, and in 40 the average period of time between the end of treatment and relapse was 37 months. In the 46 patients with the susceptible organisms, chemotherapy had been continued without interruption in 18, and was interrupted for an average period of 48 months in the remaining 28 (Table 2).

Resistance to the primary drugs in 86 patients related to the extent of disease and the treatment regimen are outlined in Table 4. Details of 34 cases in which there was failure to convert on primary treatment are outlined in Table 5. Of the total 86 cases of relapse with resistant organisms, there was resistance to one drug in 48, to two drugs in 33, and to three drugs in five (Table 6).

In the 86 cases of relapse with resistant organisms, the emergence of organisms resistant to INH (81 cases) occurred three times more frequently than resistance to PAS (28 cases), and four times more often than to SM (20 cases). It should be noted that SM was employed much less frequently than either INH or PAS in the combined regimens. The frequency was as follows: 84 patients received INH; 71 patients received PAS; and 26 patients received SM. Therefore, more SM resistant organisms might have been expected if SM had been employed as frequently as INH or PAS.

A comparison of drug resistant noncavitary and cavitary cases with consideration of the size and number of cavities in 86 relapsed cases was made (Table 6). This observation failed to show more cases of bacterial resistance in patients whose cavity size was more than four cm. than in those with cavities less than four cm. The difference in the incidence of bacterial resistance between patients with cavitary disease (63 patients) and those without cavitation (23 patients) was not statistically significant ($X^2 = 3.61$, $P>0.05$).

Discussion

It has been assumed that mycobacterial resistance is the result of the selective action of antimicrobial agents on mutants. The possibility of episomal transfer of resistance has not been investigated.

Although several investigators [2, 4, 5] have reported that emergence of resistant strains increased with the duration of treatment, this was not confirmed in the present study (Table 3). Comparison of the sputum conversion time between relapse with resistant organisms and relapse with susceptible organisms has not been

Table 1

Sputum Conversion and Organism Susceptibility Related to Extent of Disease (166 Cases)

Case Material		*Classification of Disease*							
		Minimal		*Moderately Advanced*		*Far Advanced*		*Cavitation Present*	
Treatment Failure	34	1	2.9%	9	26.4%	24	70.6%	27	79%
Relapse Resistant	86	3	3.5%	25	29.0%	58	67.4%	63	73%
Relapse Susceptible	46	4	8.7%	24	52.2%	18	39.0%	23	50%
Total	166	8	4.8%	58	36.0%	100	59.0%	113	68%

Table 2

Organism Susceptibility Related to Duration of Initial Treatment, Time of Sputum Conversion, and Interval of Time Since End of Treatment (132 cases)

Number Cases	*Average Duration of Initial Treatment with Two or More Antimicrobial Agents (Months)*	*Average Time of Sputum Conversion (Months)*	*Average Duration of Interval of Time Since End of Treatment*	
			Number Cases	*Months*
86 Resistant to Primary Drugs	12	4.5	40	37
			46	0
46 Susceptible to Primary Drugs	17	4.3	28	48
			18	0

reported. In this study, there was no difference in the time of sputum conversion of those patients in whom there were drug resistant organisms at the time of relapse from that of those whose organisms were still susceptible (Table 2).

Tubercle bacilli can survive in healed or semi-healed necrotic pulmonary lesions even after prolonged chemotherapy.[6] Viability of these organisms which are in a dormant state may persist after years of chemotherapy.[7] After chemotherapy for 12-17 months, followed by a long period of interruption of therapy (Table 2), the sputum contained either susceptible or resistant organisms. The average interval of time between the end of treatment and relapse was longer (48 months) in those patients whose organisms remained susceptible than in those whose organisms were resistant (37 months).

Phillips,[8] in a study of patients with inactive disease who were discharged from the hospital in 1955 and 1956, reported a relapse rate of 8.5 per cent. Segarra and Sherman[9] reported 828 patients with inactive disease among whom 97 (11 per cent) relapsed. In this study, the relapse rate was 15 per cent. Dye and Tucker[1] reported the number of cavities and the diameter of the largest cavity to be important in the emergence of drug resistance, but that a more important factor was whether the disease was bilateral or unilateral.

Table 3

Organism Susceptibility Related to Duration of Treatment in 132 Cases of Relapse

Duration of Chemotherapy (Months)	*Number of Cases*		
	Relapse	*Loss of Organism Susceptibility*	
3-6	37	31	(84%)
6-12	40	25	(63%)
12-24	32	17	(53%)
More than 24	23	13	(57%)
Total	132	86	(65%)

Table 4

Organism Susceptibility Related to the Extent of the Disease and Treatment Regimen (86 Cases)

Classification of Disease	*Number Cases*	*Cavitation*		*Treatment Regimen*				*Loss of Mycobacterial Susceptibility*						
		Number Present	*Cavity Size (cm.)*	*INH PAS*	*INH SM*	*PAS SM*	*INH PAS SM*	*INH*	*PAS*	*SM*	*INH PAS*	*INH SM*	*PAS SM*	*INH PAS SM*
Minimal	3			2	1			2			1			
Moderately Advanced	10	0		5	2		3	6		1	3			
	10	Single	<4	7	1		2	5			4	1		
	5	Multiple	<4	5				3			1			1
Far Advanced	10	0		8	2			6				3		1
	13	Single	<4	9	3	1		5		1	4	2	1	
	9	Single	≥4	5	2	1	1	3	1	1	2	1		1
	8	Multiple	<4	4	3		1	6				1		1
	18	Multiple	≥4	15	1		2	8			6	3		1
Total	86			60	15	2	9	44	1	3	21	11	1	5

Table 5

Failure of Sputum Conversion (34 Cases)

Classification of Disease	*Number Cases*	*Cavitation*		*Treatment Regimen*				*Loss of Mycobacterial Susceptibility*						
		Number Present	*Cavity Size (cm.)*	*INH PAS*	*INH SM*	*PAS SM*	*INH PAS SM*	*INH*	*PAS*	*SM*	*INH PAS*	*INH SM*	*PAS SM*	*INH PAS SM*
Minimal	1						1							1
Moderately Advanced	1	0		1				1						
	5	Single	<4	5				5						
	3	Multiple	<4		1		2					3		
Far Advanced	5	0		3			2	3				1		1
	2	Single	<4				2							2
	3	Single	≥4	1	1	1		2			1			
	3	Multiple	<4	1	2			1				2		
	11	Multiple	≥4	3	2		6	6				2		3
Total	34			14	6	1	13	18			1	8		7

In this study, there was no difference in the incidence of drug resistant organisms between patients with larger cavities (more than four cm.) and those with smaller cavities (less than four cm.), and a comparison of noncavitary disease with cavitary disease in the 86 drug resistant cases with relapse did not demonstrate a statistically significant difference in the incidence of bacterial resistance.

There is a possible explanation for these observations. It is generally accepted that the probability of the emergence of resistant strains increases with the bacterial population.[10,11,12,13] Therefore, drug resistant strains should develop more frequently in large cavities, presumed to contain a greater number of bacilli, than in small cavities. But the number of bacilli in any cavity is determined by the stage of evolution of the lesion. Cavities smaller than four cm. in diameter which are filled with caseous material may, in the process of sloughing, discharge much larger numbers of bacilli than those cavities of more than four cm. in diameter at the end of the process of sloughing.[14]

Canetti[15] stated that the bacterial populations found in cavities were of the order of 10^7-10^9 bacilli, whereas those found in hard caseous foci did not exceed 10^2-10^4. If this estimate is correct, such great differences in the bacterial population of the lesions should be reflected in the number of drug resistant organisms present in the sputum, but this has not been observed in the present study. It must be emphasized that Canetti's estimates are based on the enumeration of bacilli in sections strained with carbolfuchsin, which is known to bring out the acid-fast bacilli but not the chromophobic forms frequently present in great numbers. More recently, new staining techniques have been devised which allow demonstration of all forms of *M. tuberculosis*, demonstrating large numbers of morphologically well preserved bacilli in nodular lesions in which few or none can be seen in carbolfuchsin stained preparations.[16, 17] Therefore, there may be no significant difference in the abundance of the bacterial population between nodular and cavitary tuberculosis, and this may explain the similarity of these two types of disease in relation to the emergence of resistant strains.

It is known that acid-fast bacilli can lose acid-fastness or become chromophobic,[18, 19] and recent work is providing accumulating evidence that non acid-fast chromophobic bacilli can recover their acid-fastness.[14] The biological properties and pathogenicity of chromophobic tubercle bacilli, however, remain to be determined.

Summary

Of 863 patients admitted consecutively over a two-year period, there was relapse of pulmonary tuberculosis in 132. Of the 132 patients, tubercle bacilli resistant to one or more of the three primary drugs were isolated in 86 patients. There was failure of sputum conversion in 34 of 863 cases during primary treatment and loss of susceptibility was subsequently demonstrated. There was no statistically significant correlation between the presence of cavitation and treatment failure or relapse. A comparison of noncavitary disease with cavitary disease in the 86 drug resistant cases with relapse did not demonstrate a statistically significant difference in the incidence of bacterial resistance. At the time of relapse, susceptibility or resistance of organisms did not correlate with the time of sputum conversion during initial drug therapy nor could the presence of organism susceptibility or resistance be correlated with the duration of original treatment.

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A list of references may be obtained by writing The Journal.

Table 6

Comparison of Drug Resistant Cases Between Noncavitary and Cavitary Disease Together with Cavity Size and Cavity Number. Total 86 Relapse with Resistant Organism.

Cavitation		*Number of Cases*			
Number	*Size (Cm)*	*Resistant to one drug*	*Resistant to two drugs*	*Resistant to three drugs*	*Total*
0		15	7	1	23
Single	<4	11	12		23
Single	≥4	5	3	1	9
Multiple	<4	9	2	2	13
Multiple	≥4	8	9	1	18

Special Article

The Medical Profession and School Health*

Richard E. Flood, M. D.

The schools which offer instruction and the physicians and medical institutions which give medical care and health service have operated in parallel for generations, though with little mutual effort. With the discovery of the cause of epidemic contagin and immunologic and bacteriologic techniques, the development of preventive medicine concepts has made possible and inevitable the interdependence of the professions of health and education.

Early relations between physicians and schools were pioneering ventures. There was much misunderstanding. Every school and community promulgated its own ordinances, regulations, and standards of practice. Points in history will be left to the researcher to find and digest. I shall go on with the topic assigned for today—the medical profession and school health.

Every doctor who cares for a school aged child, and counsels him, his parents or teachers about his physical or emotional well being, is involved in the school health program. The private physician, when acting as a medical advisor for the child and his family, relates to the school whenever he advises or cares for school aged children. This is an old relationship that has existed as long as doctors have been serving children.

Modern educational practice and the organization of a school day are not familiar to many physicians caring for children today. The impact of school is important in understanding the health problems of school children. As school health programs develop and improve, the private practitioner will become better oriented to the school situation and its influence on children —and more willing to work with school personnel in resolving health problems of children.

It is quite difficult to project the medical profession into school health because every school is an individual with its own problems—even schools in the same district have different problems. Just as schools are not alike, doctors also differ in their views.

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In spite of these varied and seemingly paradoxical situations, many broad principles exist and these can be associated with the different categories of physicians as they should serve school health.

Early Treatment for Remediable Defects

The doctor's role of health appraisal should be performed in the office of the child's personal physician to obtain many benefits including early treatment for remediable defects. This is considered axiomatic until it is discovered that so many families *are not* identified with and cannot be persuaded to obtain a family doctor. Indigent families, as a rule, obtain health services only in time of acute and obvious need. There are other impersonal physician relations as with charitable out-patient services and one must not forget the faith healer, quack and other non-medical types of practitioner.

Every child should have a comprehensive appraisal based on and including appropriate medical and developmental history—with an evaluation of physical and emotional assets and liability and a consideration of those psychological, social and physical factors which might influence, positively or negatively, his capacity for learning. This, of course, should be discerned before the child enters school for the first time and a record with appropriate recommendation should be the beginning of a comprehensive school health file for the child which would remain in his school and transferred with the child if a change in school is made. At one time it was thought an evaluation of the child's health should be made three or four times during his 12 years of school experience; but it was discovered that rarely is a condition found which the teacher could not detect from observation and then

proper medical evaluation at the time of a specific referral resulting from poor school performance or change in behavior or appearance.

Good continuous school health records based on such health experiences of the child as periodic and referral evaluations, nurse and teacher observations, illnesses and injuries and any recommendations made and followed are essential.

Doctors must sit in and be knowledgable about school programs of physical fitness, physical education, nutrition and health curriculum, required immunizations and desired immunizations, screening for communication defects (vision, hearing, speech) and emotional problems.

The Handicapped and Gifted Child

The handicapped and gifted child must be recognized and educable means outlined for him. The physician caring for the infant and young child should identify these groups early. This physician *must* be the key professional person on the team of specialists who will diagnose and direct rehabilitation efforts as early as possible for child and family.

Physician participation in school health programs has been lax—not because of apathy but because of a lack of information concerning the needs, the inequality of the individual pupil, the schools, and school systems and the variations in school health policies and practices.

Mass techniques have now become less objectionable than was the case when fluoridation and poliomyelitis immunizations were initiated years ago. The greatest need there is for increased understanding and awareness by the practicing physicians of the problems of the schools and the pupils and the greatest barrier to understanding—*failure of communication*—requires patience, humility and time to overcome. Doctors should be invited to meet with the school board, with school administrators and their staff, with the PTA to learn their concerns and join in seeking the answers to baffling problems of child health, both physical and emotional. By working closely with these groups, they complement their efforts in helping children to mature into effective persons.

The physician in practice has specialized knowledge about children which makes him a valuable counselor to school personnel. Often a few words of advice on a medical problem will clarify a difficult situation. He should communicate frequently with school personnel, especially when his own patients are concerned—if only to protect his patents' interest.

School Health Committees

School health committees are not new—the American Medical Association, the State Medical Association and county medical societies, as well as some cities, have such committees. These are of no value unless active. Our legislative bodies should learn to use these committees for advice as they formulate laws to govern school activities and health. These committees should exist not as a substitute for the private practitioner, but to coordinate the medical resources of the community, the county, the state, and the nation in cooperation with the private physician. When asked to serve on such a committee, the practicing physician must accept either for gratis or for a fee and help to further insure good health in school.

If a school refers a child to his family doctor, the doctor should report his findings and specific recommendations back to the school's health service department. Likewise, through the child or his family, the school should forward to the physician appropriate reports of health progress or specific details about special problem cases. This mutual understanding is difficult at times because educators, like physicians, are *busy, opinionated and overworked.*

Perhaps the greatest cause of failure in the operation of school health programs has been the failure of professionals in different disciplines to understand their proper function, to limit their activities and judgments and to respect and cooperate with professionals of allied but separate disciplines. The director of the program deserves proper loyalty and he must so supervise the professional work of all so that lines of authority and responsibility are maintained and understood by everybody. The director ideally should be a member of the medical society and his nomination should be approved by that body.

Private physicians must assume the leadership for better ways to serve. Perhaps the most important attribute of a fairly successful man is the ability to distinguish the changes that are really progressive from those which retard the freedoms. Automation, centralization and even specialization are neither necessarily good nor bad; there is the potential for good as well as evil in any change. Private physicians must keep abreast with the school health program and understand its significance. They must discriminate and when possible give positive guidance. They must not oppose merely because they wish to remain as they are and preserve the status quo.

All in all, the practicing practitioner has traditionally cared for children of school age. In recent times, the patterns of modern school health practice have involved persons in both the health and educational fields. They have strengthened the role of the physician. Some perplexing and frustrating paradoxes in school health service still exist—but I'm sure cooperation between the medical profession and education will solve them.

Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (not onion skin or flimsy), standard letter sized (8½ by 11 in.) white paper. Wide margins (at least 1¼ in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Authors are requested to submit a carbon copy with the original or retain same in the event the manuscript is lost in transmittal.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for cuts should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it. The author will bear the cost of all over two one-column halftone cuts.

All scientific material apearing in *The Journal* is reviewed by the Editorial Board. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 1031, Charleston, W. Va. 25324.

Electrocardiogram of the Month

Effect of Atropine on Isorhythmic A-V Dissociation

Dong K. Chung, M. D., and William H. Jacobs, M. D.

Figure 1 was obtained from a 62-year-old man with acute inferior (diaphragmatic) myocardial infarction two weeks previously. The patient was first found to have paroxysmal atrial fibrillation alternating with sinus bradycardia one year prior to admission. Rhythm strips a and b are continuous. Sinus bradycardia exists with atrial and ventricular rates of 52 per minute in strip a. In strip b, the P wave gradually approaches to the QRS complex and by the sixth beat the P wave is superimposed on the QRS complex. It is obvious that, in the strip a, the P-R distance of the second beat (0.13 seconds) is shorter as compared to the first beat (0.16 seconds). At this point (N) A-V nodal pacemaker begins to escape with its own inherent rate (53 per minute). In other words, the P wave is driven by the sinus node whereas the QRS complex is activated by the A-V nodal pacemaker resulting in A-V dissociation. At the end of strip b, Atropine sulfate 0.8 mg. was injected intravenously while recording continuously over 210 seconds from which representative strips were selected (c and d). In strip c, 32 seconds following Atropine injection, A-V nodal rate is gradually increased to 61 beats per minute followed by three ventricular captured beats (marked S). These sinus beats (ventricular captured beats) are soon replaced again by A-V nodal rhythm with progressively increasing rate up to 75 beats per minute, as noted in the early portion of the strip d. Two hundred and ten seconds following

The Authors

- **Dong K. Chung, M. D., Physician-in-Charge, Electrocardiographic Laboratory; and William H. Jacobs, M. D., Chief of Medicine, Veterans Administration Hospital, Clarksburg.**

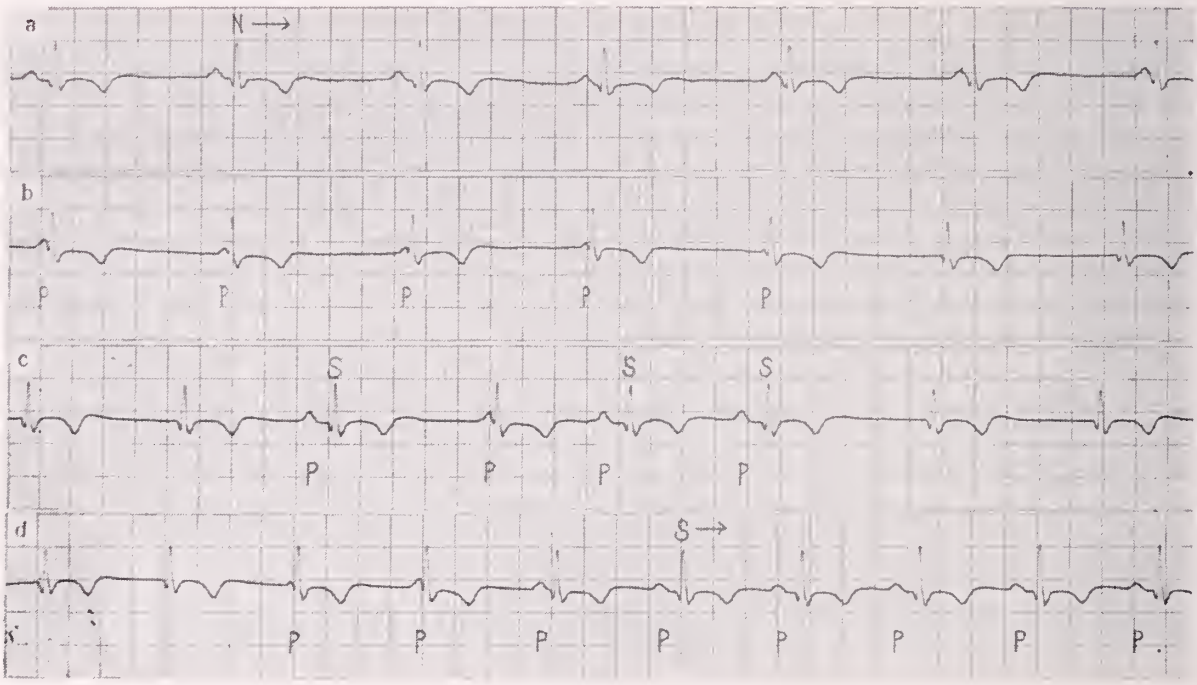


Figure 1

Atropine injection, A-V nodal rhythm disappears and the sinus pacemaker takes over the atrial as well as the ventricular activities as the sinus rate increases to 79 per minute. A short period of an apparent A-V dissociation is shown during the transition (the third, fourth and fifth beats in strip d).

Discussion

A-V dissociation, atria and ventricles being activated by two independent pacemakers, is unquestionably shown in this case. It is apparent that this is not a primary disturbance of rhythm[1] but rather the consequence of A-V nodal escape rhythm due to sinus bradycardia. In addition, the rate of the dissociated pacemakers (P wave and QRS complex) is almost equal (52-53 beats per minute) in strips a and b. This phenomenon has been termed "isorhythmic A-V dissociation."[2] One puzzling aspect of this arrhythmia is the origin of the atrial activation when P wave is superimposed on the QRS complex as shown in the last two beats of strip b. There is an A-V nodal rhythm without an obvious P wave. The most widely accepted suggestion was that the P wave is continuously produced by sinus pacemaker at the same rate as the A-V nodal pacemaker but it is buried in the QRS complex.[3] When the period is brief, it was called "Accrochage." When the two independent pacemakers maintain the same rate for longer periods, the term of "Synchronization" was used.[4] Recently, however, Waldo and associates demonstrated that the period of synchronization or accrochage was shown to result from retrograde capture of the atria by an A-V junctional rhythm. They have employed atrial and ventricular electrocardiograms and direct electrical stimulation of the heart in their study. In the case presented here, Atropine was injected while A-V nodal rhythm (without obvious P-wave) was persisting for more than 30 seconds, in an attempt to overdrive A-V nodal rhythmicity by speeding up the sinus rate.[5] This results in the appearance of ventricular captured beats (marked S) rather than the separation between P and QRS complexes. Thus, true synchronization between P and QRS complexes seems to be unlikely present during isorhythmic A-V dissociation. A delayed response of the sinus node to Atropine injection in this case was considered to be a manifestation of the "sick-sinus syndrome."

References

1. Pick, A: A-V Dissociation. A Proposal for a Comprehensive Classification and Consistent Terminology. Am. Heart J. 66: 147-150, 1963.
2. Waldo, A. L., Vitikainen, K., Harris P. V., et al: The Mechanism of Synchronization in Isorhythmic A-V Dissociation. Circulation 38:880-898, 1968.
3. Marriott, H. J. L., Menendez, M. M.: A-V Dissociation Revisited. Prog. Cardiovascular Dis. 8:522-538, 1966.
4. Schubart, A. F., Marriott, H. J. L., Gorten, R. J.: Isorhythmic Dissociation. Atrioventricular Dissociation with Synchronization. Amer. J. Med. 24:209-214, 1958.
5. Gravenstein, J. S., Ariet, M., Thornby, J. I.: Atropine on the Electrocardiogram. Clinical Pharmacol. and Therapeutics 10:660-666, 1969.

Seven Out of Eight

The Health Insurance Institute reported recently that seven out of every eight people in the United States own some form of private health insurance. The figure is based on the Health Insurance Council's 24th annual survey of national health coverage.

According to the survey, a record 175 million were insured through private insuring organizations at the start of this year, an increase of nearly 6 million, or more than 3 per cent, over last year. At the same time, private health insurance benefits to policyholders reached an estimated high of $13.5 billion. This represents a gain of more than $1 billion in benefits—the largest one-year increase in private health insurance history.

A breakdown of these benefits shows that insurance companies paid $7.6 billion (including disability insurance benefits) while Blue Cross, Blue Shield and other hospital-medical plans paid the remainder.

X-Ray Case of the Month

Julian Gasataya, M. D., General Practitioner, Lumberport, and Ray A. Harron, M. D., Radiologist, Bridgeport

JULIAN GASATAYA, M. D.

This 68-year-old male presented himself complaining of regurgitation after swallowing, some weight loss, and general weakness. He was admitted to the hospital and an admission chest film was obtained.

RAY A. HARRON, M. D.

The chest shows some minor chronic abnormalities not immediately related to the problem. In the region of the Magenblasse the normal stomach bubble is not seen but the air shadow is irregularly compressed. This is rather suggestive of carcinoma of the stomach.

DOCTOR GASATAYA:

A G. I. series was obtained.

DOCTOR HARRON:

G. I. series confirms the presence of the suspected carcinoma of the stomach.

DOCTOR GASATAYA:

The liver was enlarged and irregular. The patient was considered inoperable and he continued to go down hill and expire. Autopsy confirmed the diagnosis of adenocarcinoma involving the fundus and the body of the stomach with metastases to the liver.

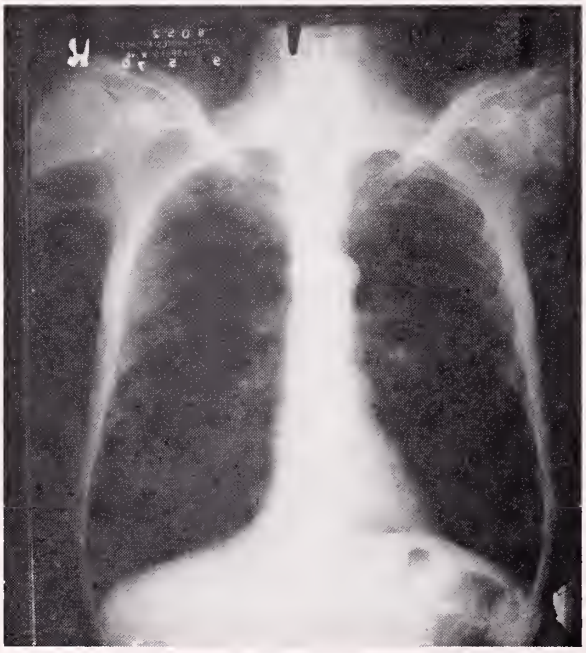


Figure 1

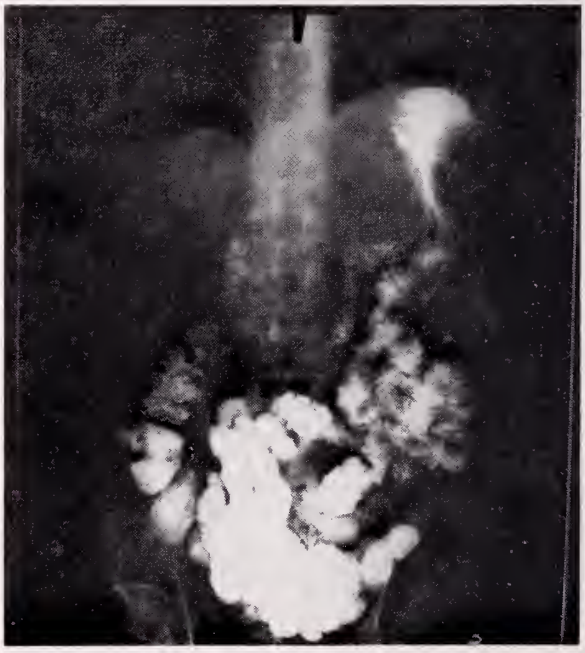


Figure 2

104th ANNUAL MEETING

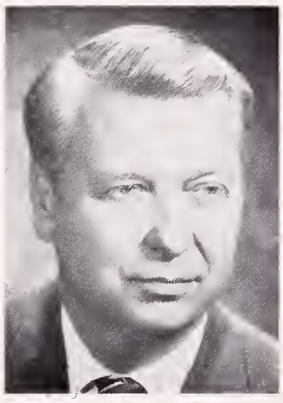
of the

West Virginia State Medical Association

The Greenbrier

AUGUST 19-21, 1971

PLAN NOW TO ATTEND



A message from . . .

The President

ADEQUATE BUDGETS ESSENTIAL

THE Legislature is in the process of studying budget requests of a number of state agencies which provide payment for medical and hospital services for the indigent and medically indigent (the poor) in West Virginia. Will the people's representatives in the Legislature *put up* the money for this care, or *shut out* the poor from offices, clinics and hospitals where care is available, but insufficient funds are made available to pay for this care?

If the state agencies—such as the Department of Welfare, the Division of Vocational Rehabilitation and the Health Department—cannot pay for the medical care of the poor, the sick who are able to pay must subsidize their care. One does not get something for nothing in medical care any more than in other goods and services.

Who can best afford to pay for the medical care of the poor—all of the people, or just the sick?

The West Virginia University School of Medicine and Hospital are providing this State with trained physicians and surgeons. In order to increase the number of graduates from the University School of Medicine and provide the people of West Virginia with a Medical Center where the highest quality of medical care anywhere can be provided, the budget request presented must be met.

The West Virginia State Medical Association and its individual members must vigorously support the medical service budget requests of welfare, vocational rehabilitation and the Health Department's Division of Cancer Control, as well as that of the West Virginia University Medical Center, by contacting their legislative friends and emphasizing the need for these funds.

GEORGE R. CALLENDER, JR., M. D., *President*

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EDITORIALS

THE STRUGGLE RENEWED

We are hardly used to replacing the zero at the end of 1970 with a one and yet we note we are already getting into the 1972 season—the 1972 political season, that is. We are about to get our hide sandpapered again by many of those District of Columbia stalwarts looking toward a primary aim of political office—getting themselves reelected. This time it is all the way, a National Health Insurance Plan, a new health-care delivery system.

We weary of the conflict. It's gone on longer than the War in Vietnam but like that war, as insufferable as it is, the alternative to slugging it out seems worse than hanging in there. Besides, we have a responsibility to defend what is right.

Not even our worst enemies will deny that doctors are hard-working, that we devote incredibly long hours to our profession. No one can deny that MEDICINE in its quest for excellence has in large measure achieved that end. A major and perhaps legitimate criticism of American medicine is that in achieving quality, it has sacrificed quantity, but which of those who has experienced the awful anxiety of serious illness in himself or his immediate family would undo or reverse that accomplishment?

New methods of health-care delivery are needed, we are told, because ours is a *non-system.* This is a clever phrase, convenient, neat and attractive for anyone struggling to make a point in criticism of the medical profession. It is also nonsense, as full of meaning as *meaningful, relevance, disaffected* or any one of a host of platitudes, the sounding brass of current liberal thought endlessly thrown at us, assaulting our ears and our intellect.

The American Health-Care System is as much a *non-system* as the free enterprise system which, although it too might be termed a non-system, still manages to get the job done more quickly, more productively, more economically, more efficiently and more abundantly than any other system yet devised.

The individual productivity of the average American doctor is astounding by any measure of comparison in any other field of endeavor. We challenge anyone to dispute this fact. To tamper with the incentives which lead to this productivity is to risk chaos in health care.

Problems exist in health-care delivery but the solution does not lie in a major disruption in the system we have, which is basically good and efficient. We need more numbers, and some things have been happening in this regard. We will have more to say on this subject.

ST. VALENTINE'S DAY

The number of greeting cards sent on St. Valentine's Day, February 14, is truly astronomical, probably over one half a billion. This is a very old custom and time has not appreciably altered the spirit of St. Valentine's Day. Most of the cards, especially those sent by young people, carry a greeting which is of a romantic nature. This essay will not philosophize on the psychological aspect of sending greeting cards. Although the author of this editorial is not a "card sender," he recognizes that sending greetings on St. Valentine's Day is an accepted tradition and may be regarded as a pleasant custom. The purpose of this essay is to point out that the Valentine heart as portrayed on so many greeting cards has a medical significance.

The beginning of St. Valentine's Day is somewhat obscure, but presumably it started as a Christian Festival to commemorate the martyrdom of St. Valentine who died on February 14 about 270 A.D. St. Valentine's Day was observed as early as the Seventh Century, but by the Fourteenth Century it had lost some of its religious significance.

The acceptance of St. Valentine as patron Saint of lovers appears quite accidental. In this romantic connection the most plausible theory of Saint Valentine's Day may be traced back to the belief held in medieval Europe that birds begin to mate on February 14. This presumably suggested that lads and lassies should choose lovers and exchange greetings of gifts on St. Valentine's Day.

The shape of the Valentine heart as portrayed on many Valentine greeting cards has a medical significance not generally appreciated. The physician realizes that the configuration of the Valentine heart does not portray the actual shape of the human heart, or for that matter the heart of any mammal. Actually it resembles the shape of the heart of the common turtle, which animal surely does not stimulate romantic emotions.

The question arises why the shape of the heart is so depicted. The answer is that the Valentine heart has the shape of the pelvic inlet of woman. This fact can be documented and is not conjecture. In fact, it can be easily verified by observing in the anatomical laboratory the scraped female pelvis and noting the shape of the pelvic inlet. Thus the Valentine heart has a significant medical interest. It is quite fitting that this analogy occurs, for the female pelvis is the cradle of the human race. Furthermore, the link between the emotions of love in the male, in part at least, and the female figure is well recognized. It is not unpleasant to contemplate, especially for those who are romantically minded, that the shape of the Valentine heart is associated with a graceful portion of the anatomy of the female. Brushing all emotions aside, scientifically it is of interest to recognize that the configuration of the Valentine heart is solidly based on a definite female anatomical structure.

THE POP TAX

This is legislative time again and medicine should be prepared for another assault on the Pop Tax. You will recall that many years ago, the West Virginia Legislature, in unbounded wisdom, enacted a bill to tax pop one cent a bottle and to use this revenue for the establishment and support of a medical school at West Virginia University. Since then, eight classes of doctors have graduated in medicine and many of these home-made physicians are now practicing in West Virginia. This is an educational program to which legislators, pop drinkers and bottlers may point with pride. If there are any doubters, let them visit the great medical complex at Evansdale Campus in Morgantown and see what pop built for West Virginia.

But it is a long time since 1951—medical education and the delivery of expert hospital care have become more specialized and more expensive and the pop tax does not now produce half the revenue so necessary to keep this plant running at capacity. Moreover, increasing hospital needs for West Virginia citizens and the growing shortage of physicians will demand a great expansion of facilities in the next few years.

Pop used to be 5¢ a bottle. It is now 15¢ but the tax is still one cent. Out of this extra price and profit, it is only fair that the tax should be increased to 2¢ a bottle so that the tax may keep pace with increased expenses of the Medical Center.

The Pop Tax is one item of taxation about which we hear no complaint from the consumer. It is harmless and painless. After all, pop is not a necessity of life and like other luxuries such as tobacco and alcohol, it should contribute more to educational needs of our State.

Here is an opportunity to increase the income of our Medical Center without hurting anyone. So let's find some legislator with derring-do, one who will cradle, nurture and enact a measure that will double our pop tax. Nurses, students, dentists, doctors, druggists, teachers and patients will bless him evermore.

GENERAL NEWS

AMA President Honor Guest At 104th Annual Meeting

Dr. Wesley W. Hall of Reno, Nevada, President Elect of the American Medical Association, will be among the honor guests at the 104th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 19-21.

Wesley W. Hall, M. D.

Doctor Hall will be installed as President of the AMA during the Annual Meeting next June in Atlantic City.

Dr. Clark K. Sleeth of Morgantown, Chairman of the Program Committee, said Doctor Hall has accepted an invitation to speak at the first session of the House of Delegates on Wednesday afternoon, August 18.

A native of Lumberton, Mississippi, Doctor Hall is the fifth generation of medical men in the Hall family, dating back to Dr. Lyman Hall, who was a member of the Continental Congress and later a Governor of Georgia. The sixth generation is represented by Dr. Wesley W. Hall, Jr., who was graduated from the University of Mississippi School of Medicine in 1964.

Doctor Hall graduated from Mississippi College and received his M. D. degree in 1930 from the Tulane University School of Medicine. He interned and served a residency in surgery at Baroness Erlanger Hospital in Chattanooga, Tennessee. He is senior consultant in surgery, orthopedics and gynecology at Washoe Medical Center and St. Mary's Hospital in Reno.

He served as President of the Nevada State Medical Association in 1960-61, and had previously served for two years as its Secretary-Treasurer. He is a Fellow of the American College of Surgeons, Southeastern Surgical Congress and International College of Surgeons.

Doctor Hall served as Nevada's delegate to the AMA's policy-making House of Delegates from 1952 until 1961, when he was elected a member of the AMA Board of Trustees. He served as Chairman of the Board from 1966 to 1968, and was named President Elect during the Annual Convention in Chicago last June.

He is a Squadron Commander of the Washoe Jeep Squadron, a search and rescue unit for the Civil Air Patrol and local police. He also is athletic team physician for Washoe County high schools and the University of Nevada.

Doctor Hall is married to the former Elise Griffin and, in addition to Wesley, Jr., the Halls have another son (a medical student) and three daughters.

'Open Forum' Planned

Members of the Program Committee have been busy making plans for the Convention since early last fall. Names of the prominent physicians and surgeons who have accepted invitations to appear as guest speakers will be announced in future issues of *The Journal.*

One of the features of the program will be an "open forum" type of session on Thursday afternoon, August 19. Physicians will have an opportunity at this session to discuss various problems affecting the profession—such as peer review, group practice, delivery of health care, etc.

Serving with Doctor Sleeth on the Program Committee are Drs. Robert D. Crooks and William E.

Gilmore of Parkersburg, Carl B. Hall of Charleston and David Z. Morgan of Morgantown.

Business Meetings Scheduled

The Pre-Convention meeting of the Council will be held on Wednesday morning, August 18.

The first session of the House of Delegates will be held on Wednesday afternoon and the final session on Saturday afternoon, August 21.

Two West Virginians Gain Dental Recognition

Two prominent West Virginians have achieved "firsts" in national dental circles.

Dr. Carl A. Laughlin of Clarksburg is the President Elect of the American Dental Association, and is the only West Virginian to gain that office.

Dr. J. Ben Robinson, a Clarksburg native now living in Baltimore, Maryland—and Dean Emeritus of the West Virginia University School of Dentistry —holds the Award of Excellence of the American College of Dentists.

Both Doctor Laughlin's election and the award presentation to Doctor Robinson came during the American Dental Association's 111th annual meeting late last year in Las Vegas, Nevada.

The award to Doctor Robinson is the only one ever given in the College of Dentists' 50-year history, and it recognized his outstanding service both to the dental profession and the public.

Doctor Robinson helped establish and develop the WVU School of Dentistry after his retirement from his Alma Mater, the University of Maryland's Baltimore College of Dental Surgery, of which he also is Dean Emeritus.

Doctor Laughlin, a native of Bridgeport in Harrison County, is an orthodontist in Clarksburg, and is a special lecturer in orthodontics at the WVU School of Dentistry. He received that school alumni association's first Achievement Award.

Recipient of his dental degree from the University of Louisville in 1932, Doctor Laughlin is former President of West Virginia's Orthodontic Society and Dental Association; the American Association of Dental Examiners, and the West Virginia Board of Dental Examiners.

He has served the ADA as Chairman of the Council on Dental Education; in its House of Delegates, and as Sixth District Trustee.

A Fellow in the American and International Colleges, and in the New York Academy of Dentistry, Doctor Laughlin is the father of five sons. Two are physicians, one also is a dentist, another is a sociologist and the youngest of the five still is at home.

Why can't somebody give us a list of things everybody thinks and nobody says, and another list of things that everybody says and nobody thinks?—Oliver Wendell Holmes, Sr.

Ambulatory Medical Care Study Plan Outlined

The National Center for Health Statistics in the U. S. Department of Health, Education and Welfare has outlined plans for a National Ambulatory Medical Care Survey (NAMCS) as part of continuing efforts to provide data on the health status of Americans.

"The success of NAMCS will depend," the Center said, "on the cooperation of practicing physicians. In October of 1969, we conducted a feasibility study which demonstrated that a high rate of participation can be obtained."

The purpose of NAMCS is to collect objective, quantitative information which can be used to describe types of ambulatory patients seen by physicians, the nature of the patients' problems, and the resources for their care. This information is needed by leaders in medicine and related professions for planning and organizing health services; for planning efficient utilization of health facilities and manpower, and for determining modifications in medical education, the HEW unit has explained.

The survey will involve a national sample of physicians who will be requested to provide data concerning a small number of the ambulatory patients they see. When NAMCS is in full operation sometime in 1972, about 3,000 physicians each year will be providing data on an estimated 240,000 ambulatory patient visits.

Physicians selected to participate in the survey will provide information concerning a sample of the patients that they see during a two-day period in each of four consecutive calendar quarters. All physicians will be replaced by new sample physicians after participating for four quarters.

The types of data the survey will collect will include age, sex, and medical problems of patients plus treatment prescribed, and laboratory tests performed for patients. All data will be held completely confidential and used only for statistical purposes.

Ambulatory medical care is by far the largest segment of the American health services system in terms of prevalence and volume. Little, however, has been done on a national scale to gather reliable information for use in planning and research. It is this dearth of information that has led leaders in the medical profession to persuade the National Center for Health Statistics to undertake the National Ambulatory Medical Care Survey. The information obtained will complement health data already being gathered by the Center through ongoing activities such as the Health Interview Survey; Health Examination Survey, and Hospital Discharge Survey.

The American Medical Association and numerous other major medical associations have expressed their support for NAMCS, and have provided advice and consultation in its development.

Health Care Crisis Demands Combined Approach

There is no one solution to curing the nation's current health care crisis, but a combination of methods might supply the answer.

This was the conclusion of a three-man panel of medical executives at the Health Insurance Council's recent conference on effective utilization of health care facilities and services in Chicago.

Dr. Eugene Guthrie, Chairman of the Board, American Academy of Comprehensive Health Planning, in a paper presented by Dr. Ellen Z. Fifer, Health Planning Director, State Planning Agency, St. Paul, Minnesota, put it this way:

"The national health scene, most particularly at the federal level, is in confusion, lacks leadership, apparently has no specific direction, no real goals and, as many people see it, is really in a crisis.

"I continue to look to the health leadership in this country and prevail upon it to permit a reasonable amount of experimentation with the variety of methodologies of planning.

"The potential of health planning is too great, and our need for its fruits much too great, so let us give support to a variety of health planning methodologies; let's put health planning in good hands; let's deliver the resources it needs to thrive on.

"Then, and only then, can we put it to an examination to test its ability to deliver according to our expectations."

According to panelist Symond R. Gottlieb, Executive Director of Comprehensive Health Planning Agency of Southeast Wisconsin, Inc., there has to be a system of comprehensive health planning based on state and local collaboration to help improve national health care.

He listed three "primary purposes" of these health agencies. They are:

1. To increase the likelihood of rational decision-making . . . concerning the allocation of resources to and within the health care system.

2. To organize communities of reasonably well-informed power groups on behalf of the health care system in order to assure a fair and reasonable allocation of resources to health.

3. To provide maxium feasible assurance that optimum value is being received for the resources allocated to health in order to make it possible to achieve the first two purposes.

The third panelist, Dr. James R. Kimmey, Executive Director of the American Public Health Association, suggested using regional authorities as part of existing areawide health planning agencies to help control costs and improve medical services.

On this basis, he said, ". . . Planning would look at the entire system for delivery of health services to the community, not just a single part of the system."

The panel moderator was Darwin Liggett, Senior Vice President of Pacific Mutual Insurance.

Doctor Pickett Named to Head Crippled Children's Board

Dr. Justus C. Pickett, an orthopedic surgeon in Morgantown, is the new Chairman of the Medical Advisory Board to the West Virginia Department of Welfare's Crippled Children's Services Program, Welfare Commissioner Edwin F. Flowers has announced.

Justus C. Pickett, M. D.

Doctor Pickett, who is Chairman of the Division of Orthopedic Surgery at the West Virginia University School of Medicine, has been associated with the crippled children's program for more than 30 years.

He succeeded, in his new post, Dr. Athey R. Lutz of Parkersburg, who resigned as a Board member and Chairman after a long period of service.

Other Board members are Dr. Robert T. Humphreys of Clarksburg and Dr. Thomas F. Scott of Huntington, along with the program's three medical consultants, Dr. Harold H. Kuhn, Dr. Thomas G. Potterfield and Dr. James H. Walker, all of Charleston. The consultants serve as ad hoc members.

Doctors Lutz, Humphreys, Scott and Kuhn also are orthopedic surgeons. Doctor Potterfield is a pediatrician, and Doctor Walker a thoracic and cardiovascular surgeon.

Doctor Hale Contributes To Conservation Series

Dr. Daniel Hale of Princeton is among those active in conservation who have contributed to a series of special publications entitled "All People and Our Water."

Doctor Hale, one of the prime movers of the national award-winning Brush Creek Watershed Project in Mercer County, also was honored recently as the "National Watershed Man of the Year."

In his contribution to a new book, Doctor Hale responded to the question, "What can I do about pollution of our water?"

The Princeton physician replied, "Join the attack on soil erosion and sediment deposition," then develop that thought with emphasis on sediment as the most significant water pollution with which man must be concerned.

Change of Address

Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. Notices should be mailed to Box 1031, Charleston, West Virginia 25324.

Federal Studies Urge Cancer, Heart Disease Programs

Three major reports before the Federal Government urge extensive programs to combat cancer and heart disease.

A special panel of 26 expert consultants, in a report to the Senate Labor and Welfare Committee, urged a multi-billion dollar crusade against cancer in an effort to erase the "staggering" impact of death and suffering caused by the disease.

The National Advisory Cancer Council urged increased educational efforts by both governmental and private agencies to warn the public against the hazards of smoking.

The Inter-Society Commission for Heart Disease Resources recommended a program that would promote drastic changes in the nation's dietary habits, elimination of cigarette smoking and research into the causes of high blood pressure.

The latter two bodies were set up by the Department of Health, Education and Welfare. The heart disease commission is made up of more than 100 experts in cardiovascular disease, epidemiology, radiology, rehabilitation and surgery from 29 medical organizations, including the American Medical Association, the American Heart Association, the American Nurses Association, the American Hospital Association and the College of Cardiology.

Based on a four-month study, the cancer report to the Senate committee included an estimate that 50 million Americans now living will develop the disease, and that 34 million of them will die unless immediate steps are taken to curb it.

The consultants recommended a sweeping program keyed to consolidation of all exisiting cancer research projects into a national cancer authority directly responsible to the President.

"The Committee is unanimously of the view that the conquest of cancer is a realistic goal if an effective national program along the lines in the report is promptly initiated and relentlessly pursued," said Benno C. Schmidt, Co-Chairman of the group.

The report recommended doubling cancer research spending to $400 million in the 1972 fiscal year, and increasing it by $100 million to $150 million in subsequent years to a $1 billion level in 1976.

The panel of consultants, which included labor and civic leaders as well as distinguished cancer researchers, said that the program should be devoted primarily to research into the causes and cures of cancer, rather than to patient care.

The National Advisory Cancer Council's fourth annual report on the state of the art in cancer research cited the more than 60,000 deaths a year in the United States from an "epidemic" of lung cancer attributed mainly to cigarette smoking. The report dealt with the chemical causes of cancer and the effects of many environmental factors, not only the "private pollution" of smoking but also the more public air pollution from industrial and commercial wastes, as causative agents in malignant disease.

As of January 2, a ban on all advertising of cigarettes on television and radio became effective under legislation approved in the Congress, and all packages of cigarettes manufactured and sold in the United States now must carry a new printed warning: "The Surgeon General has determined that cigarette smoking is dangerous to your health." This replaced the milder warning required by a 1965 law that expired in 1969 which said: "Caution: cigarette smoking may be hazardous to your health."

Although a substantial portion of this report of the Council was devoted to the problem of smoking and health, it was stated that the production of cancer by chemicals is part of a larger problem of the hazards facing man in a polluted environment. The report pointed out that the death rate from cancer continues to increase despite steady improvement in the cure rate, and suggested that this may be related largely to increased exposure of the population to cancer-causing agents in the environment.

The heart disease commission's report said the nation's cholesterol-rich diet, cigarette smoking and high blood pressure are the primary reasons for one million heart attack deaths and 600,000 heart disease deaths in the United States annually. The report cited five secondary factors: obesity, diabetes, tensions, sedentary living and heredity.

The Commission urged "safe and reasonable" changes in everyone's diet to reduce saturated fats and cholesterol even though present evidence that such dietary changes would help is now "suggestive" rather than "conclusive."

In an effort to obtain "conclusive" evidence, the Commission's experts recommended large-scale, federally-financed scientific studies of American eating habits and their consequences in terms of heart-artery health or illness. The Commission envisaged studies costing about $80 million, requiring 10 years and involving some 60,000 persons on typically high-fat diets as subjects.

Doctor Klingberg on Committee

Dr. William G. Klingberg, Professor and Chairman of Pediatrics at the West Virginia University Medical Center in Morgantown, has been appointed to the Committee on Medical Education of the American Academy of Pediatrics. The Committee is concerned with residency training and continuing education of the practicing physician.

Three Conference Themes

The 19th annual Clinical Meeting of the American College of Obstetricians and Gynecologists will be held May 3-6 in San Francisco. The program will develop three themes: perinatology, pelvic infections and diseases of the vulva, with one to be covered each day.

Rehabilitation Agency Seeks More Case Service Funds

The West Virginia Division of Vocational Rehabilitation wants a state appropriation of $2,472,007 for the 1972 fiscal year beginning next July 1. This amount is $230,452 more than its current state budget, and would earn $10,988,590 in Federal matching funds—the full amount available to the Division under the state-federal funding ratio.

Director Thorold S. Funk of the Division said that the fiscal 1972 request would, among other things, provide a 10-per cent increase in case service funds to work with more handicapped persons, and to meet rising costs of purchased services.

The Division's report for the 1969-70 fiscal year which ended last June 30 showed expenditures, from state and federal funds, of $3,448,905 in the "purchased case services" category, including $523,-679 for diagnostic procedures and $1,829,141 in physical restoration services.

The report said that 6,179 handicapped West Virginians were restored to gainful employment through services of the Division in 1969-70, an increase of 365 over the previous year. The Division began its 50th year of operation last July 1, and has rehabilitated 76,322 persons in its first 49 years.

Other highlights of the 1969-70 report specified that:

—The 1971 emphasis has been placed on providing even more services to welfare recipients, who represented an average of 14 per cent of the Division's total caseload in 1969-70. The Division and the Department of Welfare adopted a joint medical form in 1970; a joint case referral form now has been proposed, and the Division and the welfare agency are working at present under a strengthened joint agreement designed to insure mutual understanding and efficient case handling.

—Under terms of another new agreement, the Workmen's Compensation Fund will refer claimants in need of vocational rehabilitation services to the Division. Additionally, the Fund will make medical and other information about the claimants available for rehabilitation purposes. A major provision of the agreement calls for the Compensation Fund to pay for hospitalization, surgery, artificial limbs and other physical restoration services the claimants might require to be rehabilitated into gainful employment.

—The Division has established offices in the Appalachian Regional Hospitals in Williamson and Beckley. Each unit is staffed by a counselor and a secretary located in the hospital. This has resulted in additional referrals and rehabilitation can actually begin at the onset of disability. The Division said that there were 63 rehabilitations out of a caseload of 97 at the Beckley hospital during fiscal 1969-70.

—The past fiscal year saw 14,666 persons provided one or more services by the Division. Referrals reached a new high of 15,440, an increase of 2,630 over 1968-69. About half of the referrals were accepted for services.

The Division said that its 1971-72 state budget request also proposes greater emphasis on services to handicapped children through assignment of six additional counselors to work with schools.

The annual dinner meeting of the Parkersburg Academy of Medicine on Thursday evening, January 7, at the Chancellor Hotel in Parkersburg drew its usual large attendance, and several distinguished visitors. Pictured above, enjoying some informal discussion, are (left to right) Dr. Richard W. Corbitt of Parkersburg; Mrs. George R. Callender, Jr., of Charleston; Dr. George R. Callender, Jr., President of the West Virginia State Medical Association; Dr. Lyle D. Vincent of Parkersburg, Vice President of the Academy who presided at the meeting; Mrs. William E. Gilmore, President of the Woman's Auxiliary to the Parkersburg Academy; and Dr. Athey R. Lutz of Parkersburg, who, like Doctor Corbitt, is a Past President of the State Medical Association. Doctor Callender provided some interesting remarks about the importance of participation by physicians in medical activities on the state and national levels.

PG Chest Radiology Course In Virginia March 14-18

The 1971 postgraduate course in Chest Radiology sponsored by the Department of Radiology at the Medical College of Virginia will be held March 14 to 18 at the Williamsburg, Virginia, Conference Center.

The three and one-half day program, designed particularly for the Radiologist, Internist and Thoracic Surgeon, will offer an in-depth review, discussion and correlation of technical, anatomical, physiological, pathological and clinical aspects of radiology of the chest.

The agenda will be organized on a subject matter basis for a portion of each day, with certain specific topics to be discussed individually. The guest faculty includes a distinguished list of physicians from various parts of the United States, Canada and European nations.

Here is the general subject matter to be covered at the various sessions:

Monday, March 15 (following Sunday registration)—"Radiologic/Pathologic Correlation in Pulmonary Disease;" Tuesday—"Chronic Obstructive Pulmonary Disease;" Wednesday—"The Pulmonary Circulation," and Thursday forenoon, March 18—"Pulmonary Thromboembolism."

Additional information about the course may be obtained from Miss Erma Blanchard, Secretary, Department of Continuing Medical Education, School of Medicine, Medical College of Virginia, Richmond, Virginia 23219.

Cleveland Foundation Offers PG Course in Urology

The Cleveland Clinic Educational Foundation will offer a postgraduate course in "Advances in Urology" March 10 and 11. Guest speakers who will join members of the Foundation staff in presenting the course will include:

Dr. Malcolm A. Bagshaw, Professor and Director, Radiation Therapy, Stanford University Medical Center, Stanford, California; Dr. Joseph J. Kaufman, Professor and Chairman, Department of Urology, University of California at Los Angeles School of Medicine; Dr. Lester Persky, Professor and Chairman, Department of Urology, Case Western Reserve School of Medicine in Cleveland; and Dr. David C. Utz, Department of Urology, Mayo Clinic Foundation, Rochester, Minnesota.

Additional information about this and other courses may be obtained from the Education Secretary, The Cleveland Clinic Educational Foundation, 2020 East 93rd Street, Cleveland, Ohio 44106.

Drugs, Pollution Meeting Topics

Problems centered about drugs, and air and water pollution, will be among discussion topics at the annual meeting of the West Virginia Public Health Association May 5-7 at the Frederick Hotel in Huntington. The various section chairmen will include Drs. Lyle Vincent of Parkersburg and Frank S. French of Charleston, as well as Dr. William McCutcheon of the West Virginia University School of Dentistry faculty.

Looking Back 10 Years . . .

The Advisory Committee to the State Medical Association's Rural Health Committee met 10 years ago to complete plans for the Rural Health Conference that was held in October of that year. Shown are: the late Dr. Charles E. Staats of Charleston, Chairman; Dr. N. H. Dyer of Charleston, State Health Director; Miss Gertrude Humphreys of Morgantown; Mrs. W. N. Phillips of Wallace; and Mr. Gordon L. Leckie of Morgantown.

New Association Members

Dr. Nazem Abraham, 423 11th Street, Huntington (Cabell). Doctor Abraham, a native of Syria, attended the University of Richmond and West Virginia University and received his M. D. degree in 1964 from the WVU School of Medicine. He interned at Cabell-Huntington Hospital and served a residency at Cincinnati General Hospital. He served as a Lieutenant in the Medical Corps of the United States Navy and his specialty is dermatology.

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Dr. Adla Adi, 401 Medical Arts Building, Charleston (Kanawha). Doctor Adi, a native of India, received his M. D. degree in 1962 from Madras Medical College in India. He interned at Government General Hospital in India and served a residency at Doctors Hospital in Seattle, Washington. He is engaged in general practice.

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Dr. Eliseo T. Banguis, Greenbrier Valley Hospital, Ronceverte (Greenbrier Valley). A native of the Philippines, Doctor Banguis received his M. D. degree in 1962 from the University of Santo Tomas. He interned at Perth Amboy General Hospital in New Jersey, and served residencies at Euclid Glenville, St. John's and Lakewood hospitals in Cleveland. His specialty is general surgery.

* * * *

Dr. Edgar L. Barrett, The Wheeling Clinic, Wheeling (Ohio). Doctor Barrett, a native of England, received his M. D. degree from Manchester Medical School. He interned at the Manchester Royal Infirmary and served residencies at several hospitals in England and Canada. He served for two years as a Captain in the Royal Army Medical Corps and was previously located in Huntington. His specialty is orthopedic surgery.

* * * *

Dr. T. H. Chang, 121 Keys Avenue, Philippi (Tygart's Valley). A native of Korea, Doctor Chang received his M. D. degree from Honsei University Medical School in 1956. He interned at Charleston General Hospital and served residencies at that hospital, the WVU Medical Center and Broaddus Hospital in Philippi. He served as a First Lieutenant in the Army of the Republic of Korea and his specialty is general surgery.

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Dr. Kermit C. Ericsson, 600 East McDonald Avenue, Man (Logan). Doctor Ericsson, a native of Rockford, Illinois, was graduated from Wheaton College and received his M. D. degree in 1957 from the University of Chicago School of Medicine. He interned and served a residency at Blodgett Memorial Hospital in Grand Rapids, Michigan. He served as a Captain in the Medical Corps of the United States Army, 1960-62, and his specialty is general surgery.

Dr. Alberto C. Lee, 1205 Quarrier Street, Charleston (Kanawha). Doctor Lee, a native of China, received his M. D. degree in 1961 from the University of Santo Tomas. He interned at Misericordia Hospital in New York and served residencies at that hospital and the Martland Medical Center in Newark, New Jersey. His specialty is internal medicine.

* * * *

Dr. Abdul Majid, 356 Washington Avenue, Clarksburg (Harrison). Doctor Majid, a native of Pakistan, received his M. D. degree in 1961 from the Nishtar Medical College in Pakistan. He interned at Newport Hospital in Newport, Rhode Island, and served residencies at several hospitals in Connecticut, New York and the WVU Medical Center. His specialty is urology.

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Dr. R. B. Mehta, 206 Hubbard Street, Beckley (Raleigh). Doctor Mehta, a native of India, received his M. D. degree in 1962 from the Bangelore Medical College in India. He interned at University Hospital in Brooklyn and served residencies at Methodist and Mt. Sinai Hospitals in New York. His specialty is internal medicine.

* * * *

Dr. Rafael E. Molina, 800 1st Huntington National Bank Building, Huntington (Cabell). Doctor Molina, a native of Cuba, received his M. D. degree in 1949 from the University of Havana School of Medicine. He interned at Mt. Sinai Hospital in Miami Beach and served a residency at Jackson Memorial Hospital in Miami. His specialty is urology.

* * * *

Dr. Ruperto E. Perez, Jr., Appalachian Regional Hospital, Beckley (Raleigh). Doctor Perez, a native of the Philippines, received his M. D. degree in 1960 from Far Eastern University. He interned at St. Elizabeth Hospital in Elizabeth, New Jersey, and served a residency at Johns Hopkins Hospital in Baltimore. His specialty is anesthesiology.

* * * *

Dr. Nicholas Poulos, 2200 National Road, Wheeling (Ohio). Doctor Poulos, a native of St. Louis, Missouri, received his M. D. degree in 1965 from the University of Guadalajara in Mexico. He interned and served a residency at Wheeling Hospital. He served with the United States Army, 1944-47, and he is engaged in general practice.

* * * *

Dr. Donald F. Manger, 311 Elk Street, Philippi (Tygart's Valley). Doctor Manger, a native of Baltimore, was graduated from Johns Hopkins University and received his M. D. degree in 1958 from the University of Maryland School of Medicine. He interned at the University of Maryland Hospital and served a residency at the University of Pennsylvania Hospital. He served as a Captain in the Medical Corps of the United States Air Force, 1966-68, and his specialty is pediatrics.

Bronco Junction Counselors To Earn College Credit

Bronco Junction, the first effort in the nation to provide total treatment and rehabilitation of asthmatic children in a normal summer camp environment, hopes to establish still another precedent in 1971.

Dr. Merle S. Scherr of Charleston, Medical Director for Allergy Rehabilitation Foundation, Inc., which operates the eight-week annual camp on a 176-acre tract in Putnam County, said Morris Harvey College is completing arrangements for a course for camp counselors at Bronco Junction.

The course, entitled "Adolescent and Childhood Psychology" and designed to carry three hours of credit, will represent a pioneering educational effort in U. S. college and university circles, Doctor Scherr said.

The course, to be conducted by Dr. Donald Flynn and other Morris Harvey faculty members with assistance of Bronco Junction medical and consultant staff, will enable camp counselors to obtain college credit for their experience at the Putnam County facility.

Doctor Scherr said that a new conference-classroom and office building to be constructed at the camp early this year will be used for the formal Morris Harvey class lectures, and for medical and other conferences held during the camp session.

The Bronco Junction summary of 1970 activities showed that the summer camp session was attended by 58 children from 15 states in the third year of actual operations.

The eight-week program combines intensive therapy with what Doctor Scherr has described as the thrill of a first camping experience in a new kind of "non-clinical" approach for children with chronic bronchial asthma who normally require a large amount of medical care.

The camp's objective is to prepare these children for normal physical and emotional development through medical/allergy treatment, physical conditioning and camping activities under constant medical supervision.

Initial experience gained from the program has indicated a potential for reducing the need for hospital and physician services and drugs in this high-use group of children.

Sponsors believe, however, that the camp's social value, particularly in quality it promises to add to lives of asthmatic children, probably will emerge as the project's most important contribution.

Need a New Auto Emblem?

A supply of auto emblems, bearing the insignia of the West Virginia State Medical Association, is kept on hand at all times at the headquarters offices in Charleston. The price of each emblem is $5.00 postpaid.

Medical Meetings

The following is a partial list of national, state and district medical meetings scheduled in the coming months.

1971

Feb. 3-7—Am. Col. of Cardiology, Washington.
Feb. 20-24—Am. Acad. of Allergy, Chicago.
Feb. 20-27—Am. Soc. of Clin. Path. & Col. of Am. Path., Las Vegas.

March 4-6—Sou. Soc. of Anes., Houston.
March 6-11—Am. Acad. of Orth. Surg., San Francisco.
March 14-18—Am. Col. of Allergists, San Francisco.
March 24-26—Am. Surg. Assn., Boca Raton, Fla.
March 26-28—Am. Soc. of Int. Med., Denver.
March 28-April 2—ACP, Denver.
March 29-April 3—Am. Col. of Rad., St. Louis.

April 2-3—AMA Cong. on Socio-Economics of Health Care, Las Vegas.
April 14-17—Am. Gyn. Soc., Phoenix.
April 14-17—W. Va. Acad. of Oph. and Otol., White Sulphur Springs.
April 18-22—Am. Assn. of Neu. Surg., Houston.
April 24-25—W. Va. Conf. on Med. Educ., Charleston.
April 26—May 1—Am. Acad. of Neurology, New York.
April 26-28—Am. Assn. for Thoracic Surg., Atlanta.
April 28-May 1—W. Va. Chap., ACS, White Sulphur Springs.
April 28-May 1—Am. Ped. Soc., Atlantic City.
April 29-May 2—W. Va. Chap., AAGP, Wheeling.

May 1-5—Am. Psy. Assn., Washington.
May 3-7—Am. Col. of Ob. & Gyn., San Francisco.
May 10-14—Ohio Medical, Columbus.
May 16-19—Am. Thoracic Soc., Los Angeles.
May 16-20—Am. Derm. Assn., Sky Top, Pa.
May 16-20—Am. Urol. Assn., Chicago.

June 17-18—Am. Rheumatism Assn., New York.
June 20-24—AMA, Atlantic City.
June 22-23—Am. Diabetes Assn., San Francisco.
Aug. 19-21—104th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Aug. 23-26—Am. Hosp. Assn., Chicago.

Sept. 9-11—Am. Assn. of Ob.-Gyn., Hot Springs, Va.
Sept. 13-17—Int. Conf. on Coal Workers Pneumoconiosis, New York City.
Sept. 20-24—Am. Acad. of Oph. and Otol., Las Vegas.
Sept. 21-23—Ky. Medical, Louisville.
Sept. 23—Rural Health Conference, Jackson's Mill.

Oct. 1-8—AAGP, Miami Beach.
Oct. 3-7—Pa. Medical, Pittsburgh.
Oct. 11-14—Ind. Medical, Indianapolis.
Oct. 14-17—Va. Medical, Arlington.
Oct. 16-21—Am. Acad. of Ped., Chicago.
Oct. 16-20—Am. Soc. of Anes., Atlanta.
Oct. 18-22—ACS, Atlantic City.
Oct. 24-28—Am. Col. of Chest Phys., Philadelphia.

Nov. 3-6—Am. Soc. of Cyt., Washington.
Nov. 9-16—Am. Heart Assn., Anaheim, Calif.
Nov. 28-Dec. 1—AMA Clinical, New Orleans.

Dec. 4-9—Am. Acad. of Derm., Chicago.
Dec. 5-7—Am. Acad. of Hema., San Francisco.

1972

Jan. 24-26—Soc. of Thoracic Surg., San Francisco.
Feb. 4-12—Am. Soc. of Clin. Path. & Col. of Am. Path., Atlanta.

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Pericardial Coelomic Cysts*

S. Gopal Raju, M. D.

Pericardial coelomic cyst is a very rare lesion and occasionally discovered on routine chest x-ray films of persons examined for one reason or another, sometimes without any evidence of such lesion on earlier studies. Although it is hard to estimate the frequency of occurrence, it has an estimated incidence of approximately one in 100,000 or more persons in general population.[6] The majority of these are adults and are asymptomatic. Recently within an interval of one month (between October and November 1968) two such lesions were encountered on routine chest x-ray films, thus prompting the report of both cases in this article. Only these two cases were found in the files of Beckley Appalachian Regional Hospital (BARH) (formerly Miners' Memorial Hospital) since the hospital started functioning in 1956.

Case Reports

Case No. 1, V. L. M. #09-48-35.—This 43-year-old white woman was admitted to the Surgical Service at BARH for the first time on November 24, 1968, with the complaint of excessive cough and right chest pain. Chest x-ray (Figure 1) revealed a homogenous shadow seen on the right side of the heart border occupying the cardiophrenic angle. Otherwise the chest x-ray was normal. She had no past history of lung disease. She was a chronic cigarette smoker, one or two packs per day for about 15 years. Electrocardiogram was within normal limits. Other laboratory studies including the screening sequential multiple analysis were within normal limits. After admission, she did have skin tests for histoplasmosis, coccidiomycoses and PPD, all negative. Routine bronchoscopy also was done which was not diagnostic.

*From Records of the Appalachian Regional Hospital, Beckley, West Virginia.

The Author

- S. Gopal Raju, M. D., Department of Surgery, Veterans Administration Hospital, Beckley, West Virginia.

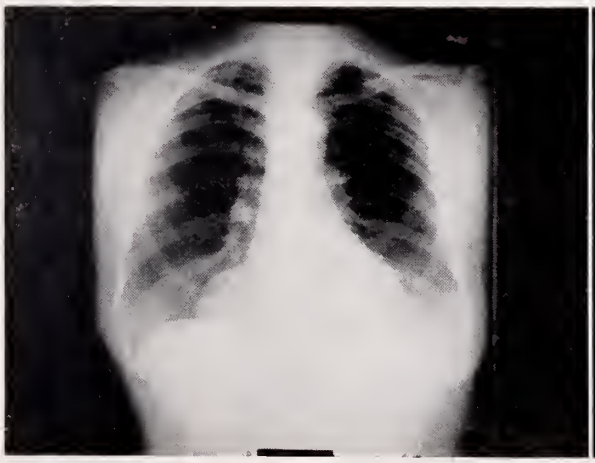

Figure 1. Case No. 1: Posteroanterior view of chest film. Homogenous shadow at right cardiophrenic angle.

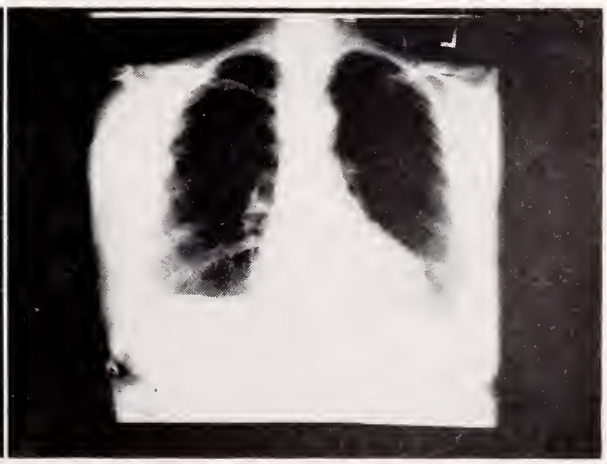

Figure 2. Case No. 1: Posteroanterior view of chest film. Follow-up study.

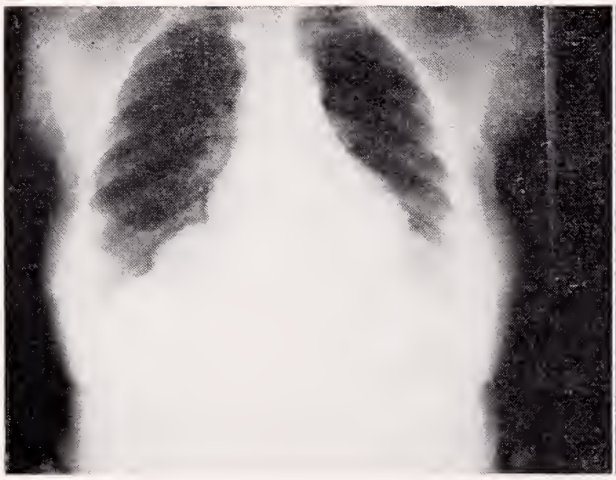

Figure 3. Case No. 2: Posteroanterior view. Homogenous shadow at right cardiophrenic angle.

Figure 4. Case No. 2: Right lateral view of same shadow overlapping cardiac shadow.

She was sent home and readmitted on December 10, 1968. Homoglobin was 14.2 Gm. per cent, hematocrit 44 vol. per cent. WBC 10,900 with 79 neutrophiles, 12 lymphocytes, 4 eosinophiles, 2 basophiles, 3 monocytes. Serology was weakly reactive to VDRL and Mazzini. Urinalysis showed 8-10 WBC and trichomonas. Repeat chest x-ray revealed the lesion to be still present, with no change in size or shape of the shadow. At this stage, there was the clinical impression of possible pericardial cyst, and right thoracotomy was done on December 13, 1968. This revealed a benign right pericardial cyst attached to the pericardium by a pedicle. During dissection the cyst was damaged and only the cyst wall was recovered. It was reported as a true pericardial cyst. The post-operative course was uneventful. She was discharged from the hospital on December 20, 1968, and on follow-up visits in the clinic she was found to be asymptomatic and there was no evidence of recurrence of this shadow at the time of this report (Figure 2).

Case No. 2, L. C. #09-6497.—This 69-year-old Negro woman was seen in the local Community Action Clinic for vague chest pain in October 1968, and the chest x-ray film showed some uniform round density at the right cardiophrenic angle (Figures 3 and 4). She was investigated for this. Upper gastrointestinal and barium enema series ruled out herniation through foramen of Morgagni. Tomogram also was done and was consistent with uniform density and probable tumor of undetermined origin. She was later referred to a surgical consultant, after a period of observation and investigations, to undergo surgical exploration. On March 11, 1969, she was admitted to the Surgical Service at BARH.

On admission hemoglobin was 12.7 Gm. per cent, hematocrit 38 vol. per cent. The WBC 5,800 with 65 neutrophiles, 2 bands, 31 lymphocytes, 1 monocytes, 1 basophile. Urinalysis was normal. Serology was weakly reactive to Mazzini and VDRL. Electrocardiogram was normal. Serum for sequential multiple analysis was within normal limits. Repeat chest x-ray revealed the

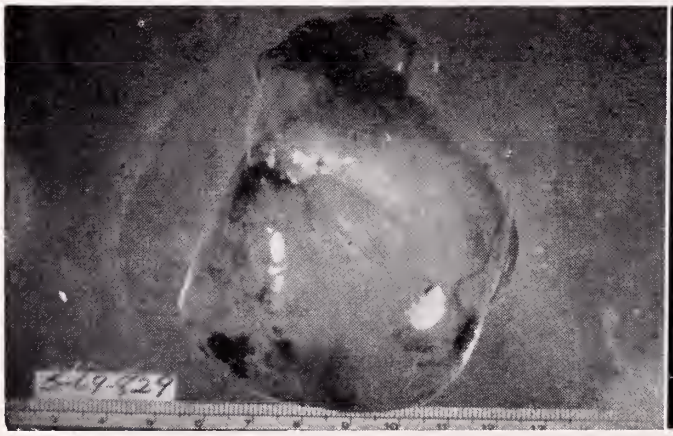

Figure 5. Case No. 2: Pericardial cyst 6.3 x 6.9 x 3.3 cm. in size.

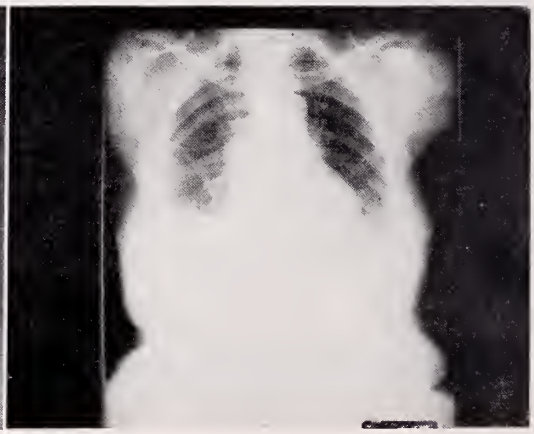

Figure 6. Case No. 2: Postoperative posteroanterior view of chest film. Follow-up study.

lesion to be still present with no change in appearance of the shadow.

The past history revealed that she had had a left thoracotomy about 15 years ago at another hospital for mesothelioma which was excised. Since then she had had no chest symptoms. There was no past history of loss of weight, pulmonary tuberculosis or other lung infection.

After her admission, a clinical diagnosis of possible pericardial cyst was made. Right thoracotomy was done and a cyst was detected. A clear water cyst was found in the right cardiophrenic angle which was carefully dissected out and the whole cyst excised without damage (Figure 5).

The pathological specimen measured approximately 6.3 x 6.9 x 3.3 cm. It was almost transparent, the clear capsule around the cyst was very soft, viscus filled with clear yellow watery fluid. Histological examination revealed loose connective tissue lined with single-layered, flat epithelium, situated mainly upon fatty tissue and a few strands of collagen. There was occasionally mild round cell infiltration and small patches of hyaline-forming microscopic plaques also were noted. Postoperative course was uneventful and she was discharged from the hospital on March 23, 1969. On follow-up studies she was found to be in good health at the time of this report (Figure 6).

Discussion

Pericardial coelomic cyst also is termed as congenital pericardial cyst or pleuropericardial cyst and is grouped under cysts of the mediastinum. Many are seen in adults, and what causes the formation of such a lesion, if it is of congenital origin, remains obscure. Congenital true pericardial cyst may be coelomic, lymphangiomatous, of bronchiolar origin or teratomatous. Acquired pericardial cyst may be neoplastic, parasitic or secondary to hematoma or chronic pericarditis. Pericardial cyst is clinically indistinguishable from pericardial diverticulum. True pericardial diverticulum or encapsulated effusion are termed as pseudocyst.

Lambert[4] stated that the pericardium arises from a series of disconnected lacunae in the embryo which later coalesce to form the pericardial cavity. If the fusion fails at any stage, it may persist to give rise to a pericardial cyst.

A congenital diverticulum also may be the result of an embryonic rest that later in life secretes fluids. If this structure is in communication with a normal absorbable surface (the pericardium), the fluid may not accumulate and the diverticulum remains dormant. Any mechanical obstruction at the junction can result either in cyst or diverticulum.[2]

Pericardial cyst is a benign, asymptomatic lesion arising from the surface of the pericardium. These cysts usually bulge laterally, on the side from which they arise and often cannot be distinguished by roentgen examination from primary mediastinal tumors. For some reason not very clear it is more often found on the right side than on the left side at the rate of two to one, and more common in men than in women at the rate of three to two.[6] The lining epithelium is a single layer of flattened cells and the fluid is very clear and limpid so that the lesion is given the poetic term, "spring-water cyst."

In the past, before the advent of radiology, very few cases of such lesions were encountered at autopsy and reported in the literature. Recent numbers of cases also are very few as a result of incidential x-ray film findings. Lillie[7] et al, in 1950, collected a total of 29 cases, including 12 cases of their own collection from the Mayo Clinic. Le Roux[6], in 1959, reviewed the literature and, including his personal collection of 20 cases, stated that at least 120 cases are on record. Of this number, 12 were multilocular and the rest unilocular. Roover[12] et al, in 1963, added three more cases of pericardial cyst to the list. Oeshner and Oeshner,[8] in 1967, reported 11 cases of pericardial cyst out of their total of 42 cases of congenital cysts of the mediastinum in 20 years. Lemmon[5] et al, and Patel[9], and few others,[14] reported one case each to their credit. The purpose of this paper, however, is not a complete collective review and it is possible that the total number of cases reported in the English literature is about 141, including the very few giant pericardial cysts and the two cases reported in this paper. They probably are more common than our statistics indicate, since many presumed pericardial cysts are not surgically removed because of a characteristic appearance and benign behavior.[8]

Clinical Manifestations. The pericardial cyst of average size is always asymptomatic. Ringertz[11] et al analyzed 95 cases of mediastinal tumors and cysts and found 61 per cent were symptom-free prior to radiologic findings of the lesion and of which 28 per cent were found to be malignant on pathologic examination. Some persons become symptomatic on learning that some lesion is inside the chest, giving chest discomfort and chronic cough. This might be due to exerting pressure on the lung parenchyma, and chronic friction between pleura and pericardium. But giant pericardial cyst is always symptomatic and may become completely incapacitating and a threat to life.

In Lam's[3] case, the cyst was extremely remarkable in the anterior chest and causing in-

capacitating dyspnea, fatigue and severe angina with a change in contour of the mass during expiration and inspiration. Shidler[13] reported a giant pericardial cyst situated between the aorta and vena cava in an infant suffering from marked dyspnea, intermittent cyanosis, wheezing and difficulty in swallowing. Yeh[14], in 1967, reported another giant pericardial cyst of a capacity of 3000 cc's of fluid in an adult, resulting in severe congestive cardiac failure and marked improvement after its removal.

Differential Diagnosis.—Pericardial cyst should be differentiated from:

1. Other cysts of the mediastinum, thyroid, thymic, esophageal, bronchogenic, dermoid and cystic hygroma.
2. Hernia through the foramen of Morgagni.
3. Primary benign and malignant tumors of the pleura or pericardium.
4. Secondary metastatic lesions.
5. Ventricular aneurysm, giant atria, dissecting aneurysm of the aorta.

Most of the above-mentioned lesions are a matter of fact of only clinical curiosity. The single most important factor in establishing a correct diagnosis is radiological examination of the chest and angiocardiography to delineate the opacity and its relation to the heart and other mediastinal structures.[5] Pericardial cysts are easily accessible and radiographic and special techniques have led to better diagnosis. A mass lying anteriorly in the chest in either costophrenic angle is most probably a coelomic pericardial cyst.[1] Gastrointestinal series and barium enema to rule out herniation through the foramen of Morgagni also must be considered. Bronchoscopy and tomogram of the shadows may be necessary. If one considers the remote possibility of a secondary metastatic lesion, a search should be made for evidence of primary lesion.

Treatment.—Needle aspiration of the fluid from the cyst is indicated when there is contraindication to operation, but sometimes infection sets in after such procedures, also the cyst may recur as the fluid secreting cells remain intact. Pickhardt[10] was the first to report a case of successful removal of "pleuropericardial cyst" from the mediastinum, in 1934. There is a difference of opinion whether surgical removal of the cyst is definitely indicated if the lesion is small and not symptomatic. With increasing experience there has been less tendency to extirpate these lesions.[8] But if the diagnosis is not certain, surgical exploration and excision are indicated in all pericardial cyst shadows. No recurrence is reported after excision in all previously reported cases.[12] A giant pericardial cyst should always be removed to render the patient symptom-free. Preoperative radiation has not been tried on these lesions and probably has no value as a therapeutic measure.

Summary

The pericardial cysts are benign lesions with minimal symptoms, but both the patient and the physician become curious because of the remote possibility of malignancy. Any indefinite shadow at the cardiophrenic angles requires investigation, and may require excision if the symptoms are persistent, and for definite diagnosis through a thoracotomy approach.

Two cases of pericardial cyst in adults from the BARH are reported. Both were found on routine chest x-ray films taken for vague chest discomfort. Preoperative diagnosis of pericardial cyst was made in both cases by simple exclusion. Both were found at the right cardiophrenic angle and surgically excised and found to be benign. The lesion may be strongly suspected again but cannot be accurately diagnosed without an exploratory thoracotomy.

Two more cases of pericardial cyst are added to 139 cases listed in the literature available to the author. Thus a total of 141 cases are on record based on the information available at the time of this writing.

References

1. Bates, J. C., & Leaver, F. Y.: Pericardial Coelomic Cysts. Presentation of Five New Cases and Five Similar Cases Illustrating Difficulty in Diagnosis, Radiology 57:330, 1951.
2. Bishop L. F., Jr., Kirschner, P. A., & Pessar, T.: Diverticulum of the Pericardium, Circulation 1:813, 1950.
3. Lam, C. R.: Pericardial Coelomic Cyst, Radiology 48:239, 1947.
4. Lambert, A. V.: Etiology of Thin-Walled Thoracic Cysts, J. Thoracic Surg. 10:1, 1940.
5. Lemmon, W. M., & Segal, B. L.: Pericardial Cysts, Dis. of Chest 48:4:434, 1965.
6. Le Roux, B. T.: Pericardial Coelomic Cysts, Thorax 14:27, 1959.
7. Lillie, W. I., McDonald, J. R., & Clagett, O. T.: J. Thoracic Surg. 20:494, 1950.
8. Ochsner, J. L., & Ochsner, S. F.: Congenital Cysts of the Mediastinum—20 Years' Experience With 42 Cases, Ann. Surg. 163:6:909, 1966.
9. Patel, A. K., & Uehara, H.: Congenital Pericardial Cyst, Internat. Surg. 48:1:11, 1967.
10. Pickhardt, O. C.: Pleurodiaphragmatic Cyst, Ann. Surg. 99:814, 1934.
11. Ringertz, N., & Lidholm, S. O.: Mediastinal Tumors and Cysts, J. Thoracic Surg. 31:458, 1956.
12. Roover, D. E., Maisin, J., & Lacquet A.: Congenital Pleuro-Pericardial Cyst, Thorax 18:146, 1963.
13. Shidler, F. P., & Holman, E.: Mediastinal Tumors; Presentation of 34 Cases, Stanford M. Bull 10:217, 1952.
14. Yeh, T. J., & Anabtawi, I. N.: Giant Pericardial Cyst with Cardiac Manifestations, South Dakota J. Med. 20:41, 1967.

Six Hundred Consecutive Prostate Gland Operations At Charleston Memorial Hospital

Zosimo T. Maximo, M. D.

This series of cases consists of 600 patients who underwent prostatectomy at the Charleston Memorial Hospital during a seven-year period ending December, 1967. Among them were 69 patients who had had previous operations on the prostate gland. The operations were performed by five staff urologists and Residents in Urology of the hospital. All case histories of patients were reviewed and the results, morbidity and mortality were evaluated and compared with other series.

Age

The ages of the patients ranged from 32 to 96 years. Eighty and five-tenths per cent were sixty years or over and nineteen and five-tenths per cent were under sixty. The average age of patients with carcinoma was four and two-tenths years more than that of patients with benign disease. It is interesting to note that patients who had radical prostatovesiculectomy were nine and one-half years younger than patients with carcinoma of the prostate as a whole. No significant age difference was found between patients with open prostatectomy and those with transurethral resection.

Associated Illnesses

More than two-thirds of the patients had associated diseases (Table 1). More than three-fourths of these were cardiopulmonary and about one-third were genitourinary diseases. The rest were gastrointestinal, metabolic and a variety of multiple illnesses. This was expected of patients with prostatic diseases because of their more advanced age.

Table 1
Associated Illnesses
430 of 600 Cases — (71%)

1.	Cardiovascular and Pulmonary	354
2.	Genitourinary (stones, etc.)	136
3.	Gastrointestinal	58
4.	Metabolic, Primary Diabetes	46
5.	Others	30
6.	Many had Multiple Illnesses	

Symptoms and Indications

Two hundred sixteen patients presented with urinary retention. The remainder had residual urines of over 100 cc's. or marked complaints of prostatism, including hematuria. All patients who had radical prostato-vesiculectomy presented with a palpable nodule on rectal examination. There was no prophylactic prostatectomy.

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Pathology

Table 2 shows the distribution of cases according to pathology and type of surgery performed. The proportion of carcinoma to benign hyperplasia was almost one to five. This corresponds favorably with the usual statistics and statements that one in five prostates in those men over 60 will show carcinoma. One per cent proved to be prostatitis, granulomatous or otherwise.

Table 2
Pathology

A.	Benign Hyperplasia	490	81. 6%
	T. U. R.	386	
	Open	104	
B.	Carcinoma	104	17.33%
	T. U. R.	93	
	Open	11	
C.	Chronic Prostatitis	6	1%
	T. U. R.	5	
	Open	1	

Operations

Four hundred eighty-four patients underwent transurethral resection while 116 patients had open prostatectomy either by the suprapubic, retropubic or perineal route. Of those who had open prostatectomy, there were eight who had radical prostato-vesiculectomy for what was considered a curable carcinoma in a patient under 70 years of age. Ninety-three of the transurethral resections were for clinically or histologically proved advanced carcinoma. Eighty and five-tenths per cent of the carcinomas were treated by transurethral surgery while nineteen and five-tenths per cent were treated by open surgery.

Eleven patients had additional procedures done at the time of open prostatectomy. Seven

had cystolithotomy and four had bladder diverticulectomy.

Malignancy was found in three prostate specimens removed suprapubically for what was thought to be fibroadenoma. All three had subsequent bilateral orchiectomies and estrogen therapy.

Tissue Removed

The average weight of tissue removed after each procedure is shown in Table 3. The highest average was obtained after radical prostatovesiculectomy. The next highest was by open prostatectomy. The average weight of tissue removed in transurethral resection was 20.5 Gm. More tissue was removed in cases with repeat resections. The least was among patients with previous prostatectomy.

Table 3

Tissue Removed—Average Weight

A.	Open Prostatectomy	58.0 Gm.
B.	Radical Prostatectomy	68.0 Gm.
C.	T. U. R.	20.5 Gm.
D.	Repeat T. U. R. (total weight)	36.3 Gm.
E.	Previous prostatectomy (different hospitalization)	11.3 Gm.

Blood Transfusions

One hundred-twelve patients required a blood transfusion during or soon after surgery (Table 4). This was about one in five patients in the whole series. Approximately one in two patients received blood during open prostatectomy while one in eight was transfused during transurethral resection.

A total of 62 patients received 500 cc's. of blood while 31 received 1,000 cc's. Only 19 patients received more than 1,000 cc's. As a rule, when bleeding was a problem more than one unit was needed. The average when needed was 770 cc's. in transurethral surgery and 800 cc's. in open surgery. All radical prostatovesiculectomies received an average of 1,625 cc's.

Table 4

Blood Transfusions—112 Patients

Amount of Blood in cc's	*Open*			*T. U. R.*		
	Benign	*Cancer*	*Total*	*Benign*	*Cancer*	*Total*
500	24	1	25	31	6	37
1000	16	2	18	9	4	13
1500	1	5	6	5	2	7
2000	1	1	2	1	0	1
2500	1	0	1	0	1	1
3000	0	1	1	0	0	0
TOTAL	43	10	53	46	13	59

Postoperative Stay

Table 5 shows the average postoperative stay in each category. The longest postoperative stay followed radical prostatovesiculectomy. This was almost equaled by patients who had repeat resection. Patients with open prostatectomy had a shorter postoperative stay than patients with transurethral resection. The latter figure was surprising but when analyzed was due to desirable repeat resections and the generally debilitated state of those receiving transurethral surgery.

Additional procedures like cystolithotomy and bladder diverticulectomy done at the time of open prostatectomy increased the postoperative stay of eleven patients by more than five days. Bilateral orchiectomy performed after resection for carcinoma prolonged the postoperative stay of 36 patients by three days.

Table 5

Postoperative Stay

A.	Open Prostatectomy	11.9 days
	Simple	8.5 days
	Radical	19.6 days
B.	T. U. R.	9.2 days
	With repeat resection	19.2 days
	With previous prostatectomy	7.5 days
	With bilateral orchiectomy	11.6 days
	With postoperative bleeding	14.4 days

Complications

Table 6 summarizes the complications encountered while the patients were in the hospital. Complications common to both procedures were postoperative bleeding, epididymitis, and incontinence. Those usually seen after open prostatectomy were bladder neck contracture, pelvic thrombophlebitis, and wound infection. Those usually following transurethral resection were inadequate voiding, urethral stricture, urethritis and bladder perforation. Medical complications such as pulmonary infarction, pulmonary embolus, stroke and myocardial infarction may follow any other surgical procedure.

The incidence of postoperative hemorrhage was about twice after transurethral resection than after open prostatectomy. That of epididymitis was about equal in both procedures. Pulmonary embolus was more common after open surgery. No route was immune with regard to incontinence. There were two cases of rectal perforation. Resection was repeated in 36 cases due to inadequate voiding.

Table 6

Complications in Hospital

	OPEN	T. U. R.
Hemorrhage	3 (2.77%)	26 (5.37%)
Epididymitis	3 (2.77%)	12 (2.47%)
Pulmonary embolus	2 (1.35%)	1 (0.20%)
Incontinence, temporary or permanent	3 (2.77%)	6 (1.03%)
Rectal perforation	1 (0.90%)	1 (0.20%)
Others	4 (3.70%)	12 (2.47%)
Inadequate resection, repeat TUR		36 (7.43%)

Mortality

There were five deaths in our series, an incidence of 0.83 per cent. Three followed transurethral resection while two followed open surgery. Sakati and Marshall,[1] in 1965, reported the mortality of prostatectomy. This was six-tenths per cent in transurethral resection, two-tenths per cent in suprapublic prostatectomy, seven-tenths per cent in simple retropubic, and eight-tenths per cent in simple perineal. Their combined incidence was nine-tenths per cent. Table 7 shows the main causes and the time of death postoperatively.

Table 7

Deaths in Hospital—Three Post Mortems

Name	*Age*	*Operation*	*Cause*	*Days P. O.*
R.C.	75	T.U.R., cancer	Hemorrhage	½ day
P.D.	47	T.U.R.	Acute renal insufficiency	6 days
C.B.	88	T.U.R.	Congestive heart failure	9 days
C.R.	83	Open prostatectomy	Rectus sheath Abcess, sepis	30 days
A.H.	73	Open prostatectomy	Pulmonary embolus	13 days

Conclusions

Six hundred consecutive prostate gland operations were reviewed. The complications, morbidity and mortality were comparable to larger series. The percentage with carcinoma falls within the 13-25 per cent quoted by Scott[2] as taken from various sources. The percentage with postoperative hemorrhage compares favorably with those presented by Maluf[3] (2.2 per cent), O'Conner[4] (2.8 per cent), and Birdsall[5] (3.7 per cent). Lich[6] reported a series of 663 patients treated by open prostatectomy with an average postoperative stay of 12.3 days. Miller and Perkins[7] collected the gland weight of 378 cases of transurethral resection with an average of 17.5 Gm.

It is our feeling that there were in our series more cases of bronchopneumonia and pulmonary embolus than recognized. The figures seem to indicate a rather persistently steady morbidity and mortality; low, but present, in prostatic surgery of this age group, in spite of adequate preoperative workup and postoperative coverage of modern antibiotic agents in virtually all patients.

References

1. Sakati, I. A. and Marshall, V. F.: Postoperative Fatalities in Urology, J. Urol. 95:412-420, 1965.
2. Scott, W. W.: Carcinoma of the Prostate, Campbell Textbook of Urology. 2:1126, 1957.
3. Maluf, N. S. R.: Transvesical Prostato-Adenomectomy with Primary Closure of the Bladder. II. Report of 180 Unselected Cases, J. Urol. 82:531-545, 1959.
4. O'Conner, V. J., et al.: Suprapubic Prostatectomy, Campbell Textbook of Urology, 3:2548-2563, 1967.
5. Birdsall, et al.: Progress in Suprapubic Prostatectomy, J. Urol. 68:729, 1962.
6. Lich, R.: Retropubic Prostatectomy, J. Urol. 72:434, 1954.
7. Perkins, J. B. & Miller, H. C.: Blood Loss During Transurethral Surgery, J. Urol. 101:95-96, 1969.

Vaccine for Spinal Meningitis

A vaccine against the organism which causes spinal meningitis may be ready for field trials soon, according to the National Society for Medical Research. Human trials, backed by successful laboratory animal data on rats, mice and rabbits at the Massachusetts State Biological Laboratories, has enabled the new vaccine to pass safety tests of the Division of Biologics Standards, according to the group.

"Approximately 27,000 children contract the dreaded disease annually in this country, as a result of the H. influenzae b organism which causes it. About 30 per cent of the children suffer long-term disability as a result of the disease, and 2,000 reportedly die," said the group.

The vaccine was developed at Harvard Medical School. Dr. David Smith, Associate Professor of Pediatrics at Harvard, said that spinal meningitis is one of the most serious, if not the most serious, of childhood infections.

Special Article

Medical Education and Medical Practice*

Frank W. McKee, M. D.

THIS is a very pleasant occasion for me to be here in response to Doctor Wiley's invitation to speak to you tonight. I believe he had in mind to have me follow an earlier presentation by my predecessor, Doctor Clark Sleeth, who would have discussed the historical background and his own and others' Herculean efforts and perspective in bringing the West Virginia University School of Medicine to its present firm position, both nationally and in the State. From that base, it was to be my responsibility to take the ball—crystal ball, most likely—and give you my impressions of how I view the School today and predict a bit of the future as I consider the road ahead. We are all aware of the hand nature took in this stepwise plan, and certainly, in our deep concern, wish Doctor Sleeth's continuing and speedy recovery from his unexpected illness. So without the benefit of his appraisal of the past, both distant and immediate, I shall undertake a discussion of where I think we are, and how we got there in medical education at the School, and where we are most likely heading as partners in medical practice.

In order to establish a runway from which to take off, I thought it might be appropriate to mention a few things from the general past in medical education. Much of this retrospection will be applicable to the West Virginia situation, though not in a specific sense, and much of it will be from views formulated during the 30 years or so of my association with medical education. Since many of you are aware of the jigsaw pieces of my career to date, I am sure you will recognize my intimate involvement at two specific periods with medical practice, and therefore you will find a specific, and perhaps welcome, flavor of the relationship between these two monumental and necessary endeavors. In a way that very statement is misleading and even erroneous, because the dichotomy of education and practice does not exist in the procedures themselves, but in the human beings who are majorly concerned with one or the other. And perhaps that is a matter on which I should also dwell as an explanation, but hardly an excuse, for our status quo—which one philosopher has defined as "the mess we are in."

Presented before a meeting of the Monongalia County Medical Society in Morgantown on November 3, 1970.

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I am sure none of you has forgotten his own experience as a premedical aspirant, an eventual applicant to medical school, a successfully admitted student with the subsequent long and arduous task of attaining his professional degree.

These recollections will be filled with a variety of emotions, probably at this point in time mostly happy ones, with occasional interjections of memories of disagreeable people, disagreeable situations and momentary failure, remorse, or apparent catastrophe. Regardless of these joys and calamities, we somehow persevered and are now able to recall, with secret personal satisfaction, our triumphs and conquests over adversity, which obviously outnumbered and overwhelmed the disappointments and difficulties.

In this sense medical education has not changed, and fundamentally, the process is still aimed at the same goal, steadily changing as all things do, to meet the turns of time and the newer concepts of disease, disability and what to do about them. I have held for a long time that the two most important items in anything we do are human nature and money—in that order. So let me discuss medical education primarily from the human nature standpoint, not forgetting that some of the changes and therefore the motivation or foundation for their inception, may well have a fiscal flavor.

A Look at Medical Education

We can look at medical education in several ways and from several points of view, but essentially there are two ingredients—the people involved, and the place—the facilities—where the process is carried out. Of the people there are several identifiable groups, and in each group

are certain outstanding or memorable individuals. First, and not necessarily in any order of importance, are the faculty, and included in the faculty are the administrators, who should in every case be identified as educators. The fact that some administrators—Deans—are not seen as educators is a relatively recent phenomenon and one not particularly complimentary or healthy. Be that as it may, the faculty, past and present and future, are largely men and women who have a liking for an atmosphere of education, whether they enjoy teaching or not, and find their personal satisfaction in engaging in activities associated with medical education. In past times, these activities were largely concerned with patients and their care, which were the main stream of medicine. But beginning with Mr. Flexner and his investigation and analysis of many of the more important weaknesses in medical education, a new basis of full-time teachers and institutionally based schools opened the door to broader fields of medicine, some only slightly or even not at all concerned directly with patient care.

Thus, the role of the practitioner, who early *was* the faculty, became only a part of the educational setting, and others versed in chemistry (as a career, mind you) and physiology and bacteriology and so forth, stepped into important and necessary places in medical schools. And the role of the practitioner also became a more specialized one, for as the scientific basis of medical education became broader and increasingly defined, the areas to which it was applied in medical practice became clearer. Paradoxically, however, this caused a narrowing scope of practice because the practitioner, with so much more to know about obstetrics, or pediatrics, or surgery, began to select one of these areas as his primary endeavor and field of concentration. And this same phenomenon also quite legitimately and naturally pervaded the clinical curriculum with gradual development and eventual assignment of experts to teaching the subject matter and practice of their particular and special area of interest.

It is in this area that the principal conflict, dislike and distrust has developed between the medical school and the general practitioner or family doctor. There is no question that in a climate of specialty there must be generalists who provide entry into the system of medical care, with a warm understanding of medical care and patients as a whole, an integration, a sum of parts, as opposed to individual interest, concern, and expertise with a body area, an organ system or a specific malady of chemistry or physiology. On the other hand, even the generalist is hard put to complain that obstetrics, to the student, should be presented by an expert in this field, and the same applies to dermatology, pediatrics or any practice province.

Much of the problem, as I see it, has come about from quite a different source and one that is apparent, once it is mentioned. It is an equal and shared blame—that is, it springs from situations of both medical practice and medical education.

Flexner Report and World War II

In the years between Flexner's initial impact and World War II, as the medical schools moved into a more appropriate academic setting and began to establish their own hospitals and clinics under primary faculty control, a large number of expert practitioners continued their interest in medical education and the personal fruits therefrom, by deep engagement in the teaching process. Faculties, full-time that is, were relatively small, and much of the bedside and clinic teaching fell to those who were unquestionably highly qualified to meet this basic responsibility. This had mutual advantages, for the student thereby had intimate exposure to the person, the technique and the philosophy of private medical practice.

However, World War II caused a general acceleration in medical education, and a concomitant dearth of civilian physicians, both in response to the nation's military needs. Following the war was an enormous surge of interest in medicine, and the whole system was shaken and subtly became reconstituted. First, came an early period of refreshment and retooling of a large number of practitioners, many seeking training and experience for new practice endeavors, or brushing up on their previous but now rusty skills. There was a concomitant wave of established or newly awakened interest from those deprived of an earlier entry into medical education by military service. Second, a new and major effort—categorical research—entered the picture. This enterprise was supported by a great deal of money—Federal money—and was based on the prevailing theory that developed the atom bomb, which in its fortunately limited use, had brought the Pacific War to an abrupt halt. This theory is that if enough men, money and materials are poured into a problem, however difficult or elusive, the solution will be found. And since much had been learned in the war's progress about medicine—anti-malarial drugs, new techniques of surgery and therapy, blood and blood substitutes, to name a few examples—it seemed logical to suppose that other major problems of cancer and aging and vascular disease also might be overcome. It should be noted here, that the Fed-

eral Government and the National Institutes of Health did not invent medical research, much as certain advocates of these agencies might like to have us think so, but they did give it enormous impetus.

This impetus built up gradually and gained its recognized influential strength at a time—in the early 50's—when other things were happening. The wave of veterans returning to civilian life had reached its crest and was falling. The Korean War and the reduction of applicants for medical school, as a result of the reduced birthrate of the depression years, were upon us. The medical school's fiscal reserves of the war years, largely husbanded because of many fewer opportunities to spend, were beginning to dry up. The governmental resources for research were a bonanza and were eagerly sought, without benefit of the disturbing hindsight that now shocks the medical educator. Research became the name of the game, and the faculties gradually became swollen with full-time people, bringing along not only their grant support, but overhead funds to channel into educational rescue operations, and construction money to provide more space to continue this burgeoning cycle of expansion. Graduate students were engulfed in the process as research personnel, so labelled to provide another increment of both accomplishment and need to convince the obliging Congress of further necessity for increased research support.

Post-War Awakening

At the same time all this was going on there was also post-war awakening on the part of the American public. They had heard and read about the new miracles of medical science and were beginning to see them on their new TV sets. The population was growing, many country boys had seen the sights while in the military, and even country doctors were aware that there was more to the game than the office and the black bag. New hospitals, under early Hill-Burton support, sprung up. Laboratory and x-ray wings and additions appeared, and the physicians became busier and busier. A young man entering practice no longer sat in a lonely office for two or three years, whiling away some of his time in the hospital out-patient service or doing school and insurance examinations to support himself while his practice developed. He hung out his shingle and ceased to accept new patients often in less than a year. It is true that he was squeezed out of the medical school by a growing full-time research oriented and supported faculty, but his own limitations of time to engage in this important exchange were also a major factor in his disappearance from direct involvement in education.

So to recapitulate—we have the growth of medical specialization, the educational changes apparently detrimental to encouragement of general practice, the growth of full time specialized faculties, and the withdrawal of active practitioners from the intimate and basic contact and involvement with medical education. These are the roots of faculty problems and account for the human nature part with the bitterness, the recriminations and even the nostalgia that pervade American medicine, both education and practice, today.

The Medical Student

While all these events were unravelling, what of the student? In the 1920's and 1930's medical students were individuals with general capability, sufficient motivation, and usually money enough, or occasionally incentive enough to overcome the perils of the educational demands for both time and effort. Most applicants were accepted. Grades were important, but not all that important as some of us can testify. The doctor's life was attractive, but certainly there were a number of pretty average incomes, and even impecunious practitioners. The depression of the thirties took its toll and added to the picture I have just painted. Again the war of the forties provided a stimulus. First, the military support and then the G. I. Bill provided considerable funds to both school and individual, and the glamour of medicine, added to wartime experience of many bright and eager people, did the rest. Multiple careers—specialities, research, even administration—began to open up to a profession ill prepared to cope with this expansion of opportunity on top of expanded needs for just plain patient care.

The Manpower Shortage

Manpower shortages developed first insidiously and then flagrantly. The Federal government began to see the inconsistency of promoting opportunity and enthusiasm and demand without much concern about the human factor necessary to perform the promised services or fill the now essential slots, and the manpower race suddenly began. The student happily pitched in, complaints of insufficient points of entry into the profession began and now we have a full scale imbalance, with castigation rampant, involving you and me, and particularly the AMA. The Congressional and administrative culpability is always nicely handled by the election process and terms of office, but somehow these same excuses never seem to apply to other organizations like the AMA, universities, medical societies, etc. even though the same changes take place.

One more point—a vital one—that involves the student and the house officer-part of this story. Over the years the attention to leisure time has become a national fetish. Early on this was a reaction to long hours, poor working conditions, poor pay and little regard for what is now called the "quality of life." As the concept of shorter hours, three shifts instead of two, rising pay, fringe benefits and increasing appetites for all the products of our industrial know-how, became more widely accepted, such attractions escaped neither the profession or its embryonic members. The coffee break (a disease of World War II), the 40-hour week, an expanded schedule of holidays, specified vacations for both winter and summer, are as much a part of student and professional life as they are for the business executive and the automobile or steel worker. The student is perfectly willing to be involved in patient care, between 8:30 A.M. and 5:00 P.M., and the house officer expects to be free—really free—on specific nights and weekends. All of these groups have also become much more conscious of their dollar leverage as children of scarcity, and the resultant ballooning of salaries of house officers should come as no surprise. In Canada, even the third and fourth year medical students are now demanding a monthly salary for what they consider to be calculable contributions to patient care which is covered under nationally supported health plans. Many of these situations may sound crass and commercial, and somewhat removed from older Hippocratic concepts of patient care involvement and responsibility, and from traditional student poverty, but whether we like them or not, they are here and we must cope with them.

The Patient

Another important human component in this discussion of change in medical education and medical practice, is the patient. There are not only many more patients, but their expectations are higher and their demands are more strident. Secure in the general back-up of third-party payment and considerable Federal support, particularly for the elderly and the indigent, the demands have far exceeded the manpower capability to comply. This situation is at the bottom of most of the medical profession's problems—whether in the education or the practice setting—because anyone with a promise in his hand, and unavailable talent to fulfill it, is a disagreeable and disturbing person. Unfortunately, those who make the promises are usually not the object of the frontal attack, and it will be interesting to see what will be the outcome as the promises for service build up and up and the capability of the manpower to meet them becomes less and less. Eventually it may occur to the politicians and the professional bleeding hearts that every system of skilled and service oriented talent has its limits, and unless primary attention is paid to multiplying the skilled and necessary humans who render these services, the promises cannot be kept. For example, in our health crisis, how many governors and legislators and social workers are skilled abortionists? How many lawyers, judges, and other advocates of human rights are capable of performing the acts to which the mass of citizens is declared to be entitled? Not many, yet the principle continues to be enunciated, and those who must perform the legislated and adjudged tasks are caught in the middle with a near-impossible challenge.

I will not further prolong this discussion. All these matters are of great concern to those of us who are responsible for medical education and medical practice. One philosopher in writing about examinations has stated that the greatest fool can pose more questions than the wisest man can answer. So it is today with our profession, and the ability to survive depends on our skill and agility in anticipating problems and meeting them head-on or otherwise coping, with majority satisfaction.

We are in a strange predicament. The more we do, the more we are expected to do; the more successful we are, the more successful we are required to be! American medicine has done a fabulous job, and both nationally and internationally the profession has contributed far beyond its share of responsibility for general social uplift and improvement. But the old "what have you done for me lately" question is always with us, and we are required to answer it.

Facing the Problems

Therefore, to come back to the theme of this conversation, in the local setting here in West Virginia, the School of Medicine is well aware of its responsibilities to provide a well qualified physician to tackle the problems of society that confront us. With the background I have described, there are many problems, and we have them all and probably the most pressing is how we maintain quality, as we meet our increasing responsibilities and challenges. The answer is not merely numbers—the cliche is "warm bodies." It is skilled and sensitive people, performing a quality job and available when and where they are needed. The responsibility to do this is a shared one—partly the educational system, partly the practice system. The essence of success lies in cooperation; for the educational system, regardless of criticism and pressure, cannot

simultaneously undertake large patient care responsibility. We can prepare people to render important health services, and can share in the planning and support of those necessary instruments and individuals to whom this burden falls, but we cannot undertake the full load. Neither can the practitioner, beset by his major responsibilities, offer more than token input into the education and preparation process. He can complain, or he can understand, or perhaps do both, but the survival and the progress and improvement of our roles in medical care and the health of our fellow citizens is a joint effort which cannot be separated. Neither can it be a constant source of irritation and castigation, for such conflict and concern saps our strength and energy and diminishes our resolve and our incentive and our results.

It is my hope that medical education and medical practice will once more attain a cooperative singleness of purpose and common course that was once prevalent when prominent academicians were also Presidents of the AMA and other organizations recognized for their leadership and concern for matters medical. We have a good School here in this State and there is as much understanding of our responsibility in medical education to supply qualified people for the gaps in practice, as one will find in any medical school in the country. In turn we need the cooperation, the support and the understanding of each medical society and each practitioner. There is no longer any room for competition or bitter complaint—there is too much to be done. The work ahead is prodigious, but in most instances, the greater the challenge, the greater and the more successful the response. West Virginia is a State of modest numbers, but great potential. I hope we can work together—the school and the profession—to surmount the difficulties and show the nation how capable people, cooperating in a common problem, can perform a quality service and reach a quality solution.

Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (not onion skin or flimsy), standard letter sized (8½ by 11 in.) white paper. Wide margins (at least 1¼ in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Authors are requested to submit a carbon copy with the original or retain same in the event the manuscript is lost in transmittal.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for cuts should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it. The author will bear the cost of all over two one-column halftone cuts.

All scientific material apearing in *The Journal* is reviewed by the Editorial Board. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 1031, Charleston, W. Va. 25324.

Electrocardiogram of the Month

Post-Ectopic T Wave Change

Edward K. Chung, M. D.

Occasionally, the T wave of the sinus beat immediately following a ventricular premature contraction may show alteration of its contour, amplitude and/or direction (Figure 1). The phenomenon is termed "post-ectopic T wave changes." On rare occasions, two or more successive sinus beats following a ventricular premature contraction may show post-ectopic T wave changes (Figure 2). The mechanism of the post-ectopic T wave changes is not clearly understood, but it is considered to be due to alteration of the ventricular repolarization process related to a preceding post-ectopic pause. Thus, the post-ectopic T wave changes are much more common following an interpolated ventricular premature contraction than a full compensatory pause (Figures 1 and 2). The recognition of the post-ectopic T wave changes is important clinically because this phenomenon is almost always indicative of organic heart disease.

The Author

- **Edward K. Chung, M. D., Professor of Medicine and Director, Electrocardiographic Laboratory, West Virginia University Medical Center, Morgantown.**

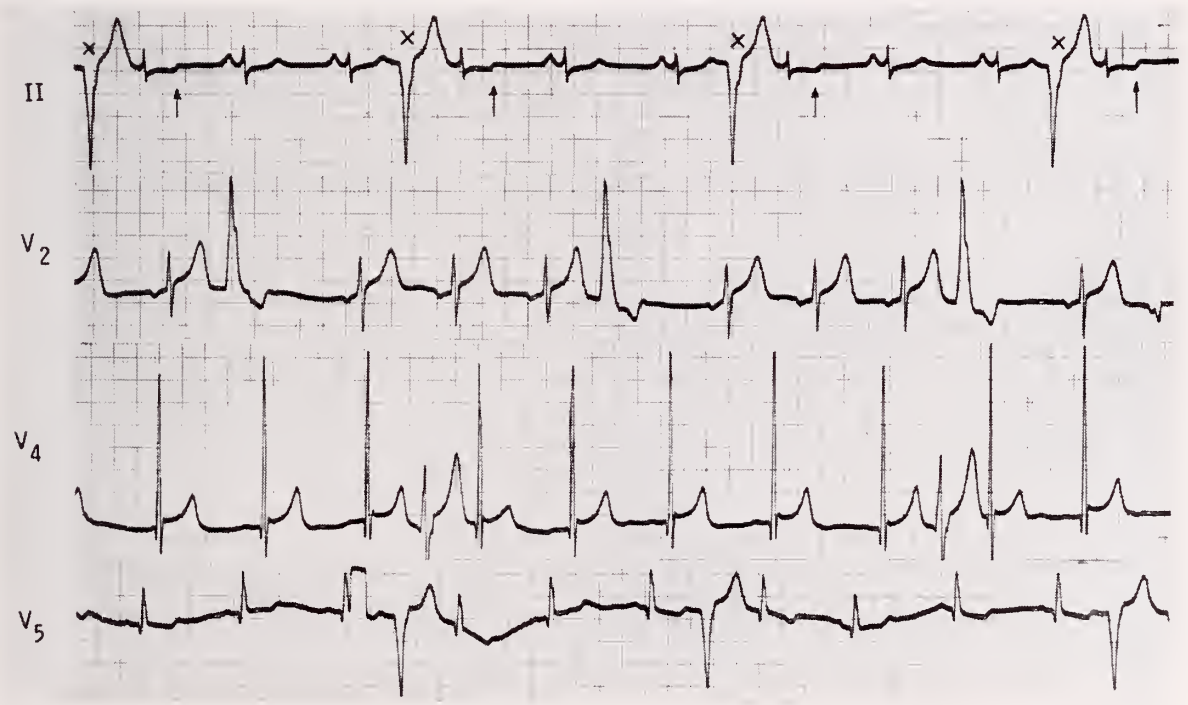


Figure 1. Sinus rhythm with frequent ventricular premature contractions. It is interesting to note that the post-ectopic T wave change (indicated by arrow) occurs only following interpolated ventricular premature contractions (marked X).

(See Figure 2 on Next Page)

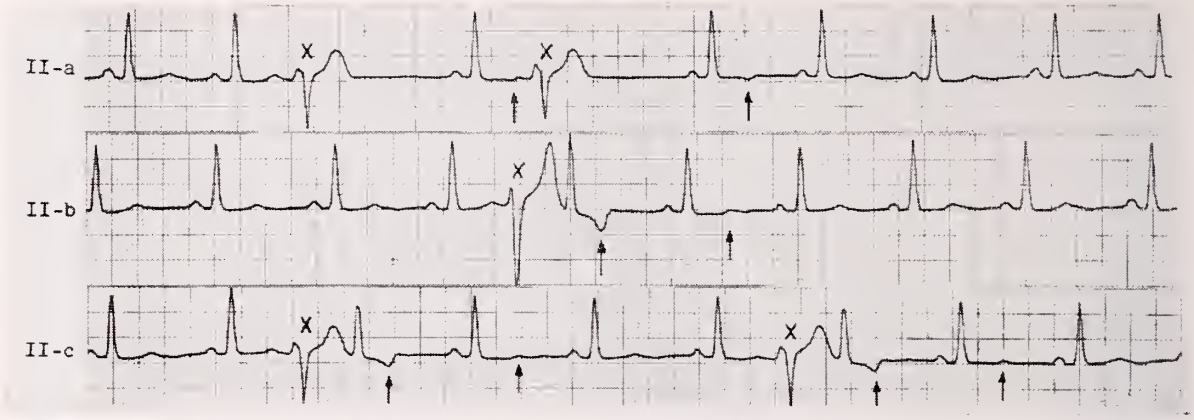


Figure 2. Leads II-a, b and c are not continuous. Note that the post-ectopic T wave change is observed in two consecutive sinus beats (indicated by arrows) following interpolated ventricular premature contractions (marked X).

To Physicians in Training

To all physicians in training and especially West Virginia residents. West Virginia is in need of physicians in all categories for rural and urban practice. Any physician desiring information concerning openings in the State can communicate with *The Journal. The Journal* will publish free for 6 issues pertinent information concerning any qualified physician who is seeking a location in West Virginia. Single copies of *The Journal* listing practice opportunities will be mailed to physicians upon request.

A roster containing a list of officers of county societies and specialty sections of the West Virginia State Medical Association is available upon request to the headquarters offices. Also, information pertaining to West Virginia licensing laws will be mailed to interested physicians. Interested parties may then write the officers of component societies or sections for further information.

Any other information about West Virginia will be secured from outside sources, if possible, and sent upon request. All letters to *The Journal will* receive individual immediate attention.

X-Ray Case of the Month

Elden H. Pertz, M. D., General Surgeon, Weston; and
Ray A. Harron, M. D., Radiologist, Bridgeport

Elden H. Pertz, M. D.:

This 15-year-old white male presented himself at 10:00 P. M. complaining of several days of increasing abdominal pain, nausea and vomiting. Several hours previous to being seen he felt something rupture in his abdomen. Physical examination revealed a tender rigid abdomen with rebound tenderness. A clinical diagnosis of ruptured appendix with peritonitis was made and laparotomy performed. Surgery confirmed the clinical diagnosis. The perforated appendix was removed and a considerable amount of pus drained from the abdomen.

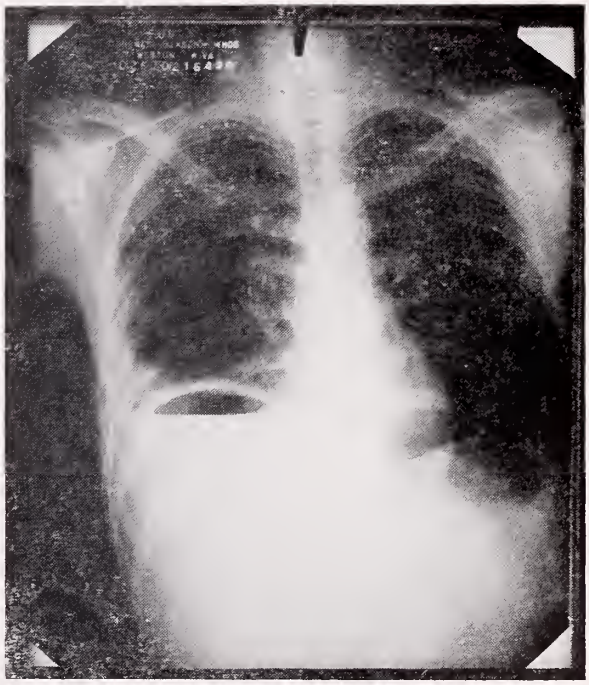
Six days later the patient was doing well except for daily temperature rise to about 100.5°F. There was no more drainage from the two drains left in the abdomen and the patient wished to be discharged. A chest film was obtained.

Ray A. Harron, M. D.:

There is a collection of gas and fluid beneath the right half of the diaphragm. There is some pleural and parenchymal reaction at the right lung base. It is felt that this represents a subdiaphragmatic abscess. Intraperitioneal air from the laparotomy or interposition of the bowel might be mentioned. The former is unlikely because the thickness of the "diaphragmatic" shadow (6mm) is too much normal diaphragm and because of the lack of air on the left side. The latter is unlikely because of lack of haustral markings.

Doctor Pertz:

Using the abdominal approach the subdiaphragmatic abscess was visualized and drained extraperitoneally. The patient made an uneventful recovery.



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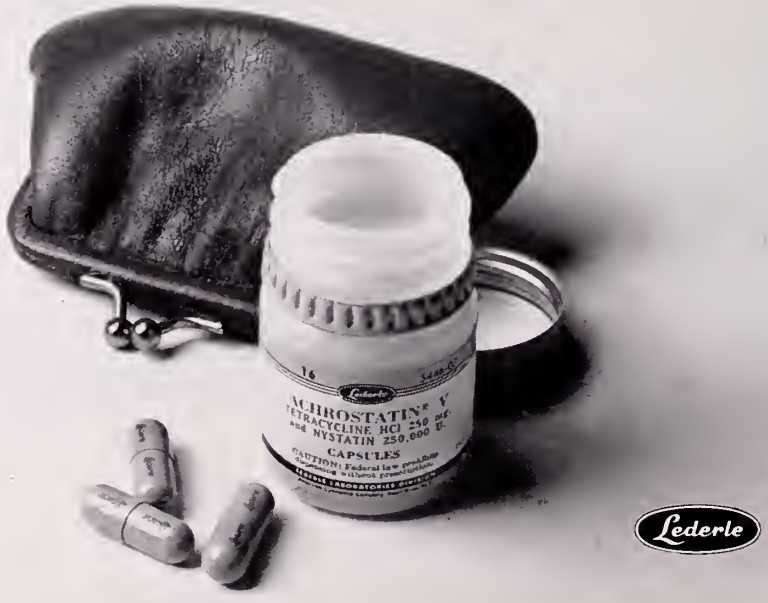


104th ANNUAL MEETING

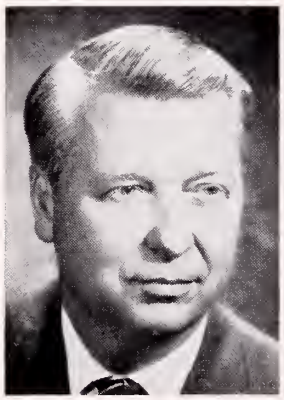
of the

West Virginia State Medical Association

The Greenbrier

AUGUST 19-21, 1971

PLAN NOW TO ATTEND



A message from . . .

The President

A FEW SUGGESTIONS

THERE is increasing dissatisfaction, as expressed by patients and physicians alike, with the present activities of the fiscal intermediary—Blue Cross of Charleston—for Part A of Medicare in West Virginia.

The progressively restrictive, and at times arbitrary appearing, retroactive limitations on payment for institutional care for the elderly in acute general hospitals, and in rehabilitative and extended care facilities, frequently are inconsistent with good medical practice.

The result of these limitations has left many elderly patients with large, unexpected hospital bills which they find difficult if not impossible to pay—and the hospitals with losses which, in nonprofit institutions, are difficult to recover.

As physicians, we must—as the advocates of the patient and the institutions providing services for Medicare beneficiaries—take these specific steps:

1. Support the length of stay in medical facilities consistent with good medical practice.
2. Warn patients, prior to or at the time of admission, of the unpredictability of Medicare coverage, including retroactive policies.
3. Encourage patients to appeal to the fiscal intermediary and the U. S. Social Security Administration in instances of dissatisfaction.
4. Make every effort to inform the public of this problem in the rendering of medical care to the elderly under Medicare.
5. Encourage patients also to express their dissatisfaction to their congressmen, in hopes of changes in the rules and regulations promulgated by the intermediary, the Social Security Administration and the U. S. Department of Health, Education and Welfare in order that the true intent of Congress in the enactment of Medicare may be fulfilled to truly help the elderly obtain quality medical care.

Geo R Callender Jrs.

GEORGE R. CALLENDER, JR., M. D., *President*

THE WEST VIRGINIA MEDICAL JOURNAL

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The Publication Committee is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

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EDITORIALS

NOT EVEN A THANK YOU

A friend of ours recently handed us two news clippings which together illustrate the whipsaw technique being applied to American physicians. The first, a News Service story, reports that the Department of Health, Education and Welfare announced that Medicare premiums will be raised 6 per cent on July 1st. "Most of the 6 per cent increase is necessary to meet the rising costs of physicians' fees, the Health, Education and Welfare Department said." The story continues, "Physicians' fees increased 7.1 per cent from December, 1969, to November, 1970, a Social Security spokesman said. During that same period the consumer price index of selected goods and services rose only 4.95 per cent."

The second clipping from a Medical News magazine reports: "Weary of waiting for the lame-duck Congress to act, the Social Security Administration has gone ahead on its own and lowered the boom on Medicare payments. It is notifying insurance carriers that as of January 1, 1971, doctors will be paid no more than what 75 per cent of their local colleagues charged for the same services in 1969. The cut-off point had been the 83rd percentile, based on 1968 fees."

What this adds up to is that at the same time we are being branded as inflationary fee gougers, we are actually having our fees frozen or reduced.

If this were an underground newspaper, we could say it like it is, or like it should be said, but it is a little like being copulated without being osculated.

THE STIMULUS TO CARDIAC HYPERTROPHY

It is known that cardiac hypertrophy is often associated with diseases of the heart. It may also be produced experimentally in various species of animals by a number of different methods. Despite the fact that it has been known for many years that under certain conditions the heart enlarges, it is generally conceded that the exact nature of the stimulus to myocardial hypertrophy is still not known.

A theory which was rather widely accepted for over a decade was that postulated by Eyster,[1] which was known as "the theory of injury hypertrophy." In essence, Eyster believed that cardiac hypertrophy occurred only when the cardiac fibers had been stretched well beyond their physiological limits. The injury to the muscle fibers produced by undue stretching caused the fibers to enlarge. It has been shown however, by several workers[2, 3, 4] that Eyster's theory is no longer tenable.

Besides the theory of injury hypertrophy a number of current hypotheses have been suggested which might cause cardiac hypertrophy; among those are, nutritional deficiency of the myocardium, excessive hormonal secretion, and increased external work of the cardiac chambers. None of these, however, is without serious objections, and none has been entirely accepted by the majority of workers in the field.

Recently Badeer[5, 6] has proposed a new hypothesis concerning the stimulus to cardiac hypertrophy. He believes it is more inclusive than any other theory explaining cardiac hypertrophy, although he admits that it has not been entirely proved.

He has postulated that the chronic increase in myocardial metabolic rate per beat per unit mass of tissue probably constitutes the stimulus for hypertrophy. He believes that the conditions which increase the force of contraction of the wall of cardiac chamber for a short period are accompanied by an increase in the oxidative metabolism of the myocardium per unit mass of tissue per heart beat. Hypertrophy of muscle fibers develops if these conditions are maintained over long periods.

The hypertrophy increases the contractile force of the wall, and because the wall becomes thicker it restores the myocardial metabolic rate per unit mass of tissue per heart beat. It is suggested that the hypertrophy may be considered as a useful response from the standpoint of myocardial energetics.

The hypothesis outlined by Badeer undoubtedly has merit. It will be of interest to see what further proof he will be able to offer in support of his theory.

1. Eyster, J. A. E.: J.A.M.A. 91; 1881 (Dec. 15) 1928.
2. Beznak, M., and Hajdu, I.: Schweiz. med. Wchnschr., 75: 300, 1945.
3. Stickney, J. C., Northup, D. W., and Van Liere, E. J.: Circulation Research, 4: 217, 1956.
4. Kerr, A.: Am. Heart J. 54: 23, 1957.
5. Badeer, H. S.: Circulation, 30: 128, 1964.
6. Badeer, H. S.: Am. J. Cardiol., 14: 133, 1964.

STATISTICAL TRAP

American medicine has been sharply criticized recently on the basis of statistical comparisons between this country and medicine elsewhere in the world. The source of the statistics in such areas as infant mortality and other deaths is the United Nations' Demographic Yearbook, published annually by that world body.

The trouble is that the people who cite these UN statistics do not properly set forth what the UN itself has to say about them. Particularly overlooked is the introductory chapter, which points out the extreme difficulty—indeed, even the impossibility—of drawing meaningful comparisons among nations from the data collected.

Statistics from this Yearbook are measures, actually, of different things in different countries. More important, the figures fall prey to variables such as social conditions and population groups which differ among countries. Again, the yearbook, itself, emphasizes that reporting criteria and practices vary among the nations represented.

Let's return to figures on infant mortality as an example. In the United States, the definition of a live birth generally means any sign of life—a heart beat, movement of voluntary muscles, or even pulsation of the umbilical cord. In some countries, a birth—and therefore, an infant death—are not recorded if the infant doesn't draw a breath, or, in some cases, if it dies before its birth is registered some days later.

Thus, an infant who doesn't survive the critical early hours of life would be reported as an infant mortality in the United States—but would never even be counted in the population of some other countries. In Sweden, a child does not enter the statistical universe for possibly as long as a year after birth.

Although it is often used, the infant mortality rate is not the best, or even a good, indicator of the health status of a nation. Mortality rates from selected diseases show wide national variations. It thus is necessary to look at the complete record of a nation's health to draw meaningful conclusions.

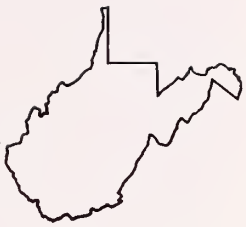
Does that mean that the United States should revise its statistical definitions? That probably would make the nation look better as compared with the remainder of the world. But it also would cloud the view of where real problems lie. And no matter how well this nation might compare with other countries, it still has a mountain of work ahead until infant mortality, and other causes of death, are pushed to irreducible minimums.

Communists Bow to Smoke Power

The Russians are having their smoking problems, too, reports the Health Insurance Institute, and even the Communist regime seems powerless to handle them.

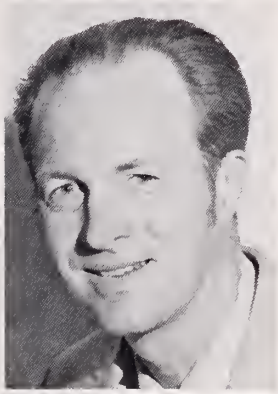
Professor Boris Petro, chief surgeon at the Sklifosovsky Institute in Moscow, in the United States for the presentation of an honorary fellowship by the American College of Surgeons, put it this way: "We know tobacco is very dangerous for lung cancer and cardiovascular ills, but the wishes of the people are stronger than the power of government in tobacco use."

GENERAL NEWS



Program on Sex Education Planned During 104th Annual Meeting

A husband and wife team will present a program on "The Family Physician's Role in Sex Education" during the 104th Annual Meeting of the West Virginia State Medical Association which will be held at The Greenbrier in White Sulphur Springs, August 19-21.



Jack C. Willke, M. D.

Barbara H. Willke, B.S., R.N.

Dr. Clark K. Sleeth of Morgantown, Chairman of the Program Committee, announced that Dr. Jack C. Willke and his wife, Barbara H. Willke, B. S., R. N., of Cincinnati, will speak at the second general scientific session on Friday morning, August 20.

During the past few years Dr. and Mrs. Willke have lectured in a great many high schools, participated in countless seminars and counseled hundreds of youth in the area of sex education. In an average year they speak in 40 cities to over 50,000 people, and appear on almost 100 radio and TV programs.

During the winter months, Dr. and Mrs. Willke take one day a week away from their six children and professional duties at home to fly throughout the United States and Canada lecturing to major audiences.

Jack C. Willke, M. D.

Dr. Jack C. Willke attended Xavier University and received his M. D. degree in 1948 from the University of Cincinnati College of Medicine. He interned at Good Samaritan Hospital in Cincinnati and served with the Medical Corps of the United States Air Force, 1952-54. He has been engaged in the private practice of medicine in suburban Cincinnati since 1954.

He is a member of the Board of the Cincinnati Social Health Association and past member of the School Board, Archdiocese of Cincinnati (90,000 students). He is a member of the Cincinnati Academy of Medicine and Chairman of its Sex Education Committee, a member of the Ohio State Medical Association and the American Medical Association. He also is a member of the Southwestern Ohio Society of Family Physicians, the Ohio State and American Academy of General Practice.

He and Mrs. Willke are co-authors of a number of publications, including "The Wonder of Sex, How to Teach Children, A Guide for Parents and Teachers." More than 200,000 copies have been printed to date.

Barbara H. Willke, B. S., R. N.

Mrs. Barbara H. Willke received B. S. and R. N. degrees in 1944 from the University of Cincinnati College of Nursing and Health. She served as an Instructor in the Department of Nursing Arts at St. Elizabeth Hospital in Dayton, Ohio, 1945-46, and took graduate work at the University of Dayton, 1946-47.

Mrs. Willke served as Chairman of the Department of Nursing Arts at Jewish Hospital in Cincinnati in 1947 and as Chairman of the Department of Nursing Arts at Good Samaritan Hospital in Cincinnati, 1948-50. Since 1950 she has been a full-time wife and mother.

She and Doctor Willke were pioneers and past chair couple of the Cincinnati Family Life Bureau, as well as serving as Consultants in sex education for the public and parochial schools of Cincinnati. They are members of the National Council on Family Relations and members of the National Task Force formulating sex and family life education programs for the Catholic schools of the United States.

AMA President Honor Guest

Doctor Sleeth announced previously that Dr. Wesley W. Hall of Reno, Nevada, President Elect of the American Medical Association, had accepted an invitation to appear as a speaker at the first

session of the Association's House of Delegates on Wednesday afternoon, August 18.

Doctor Hall will be installed as President of the AMA at the Annual Meeting in June.

Business Meetings Scheduled

The Pre-Convention Meeting of the Council will be held on Wednesday morning, August 18.

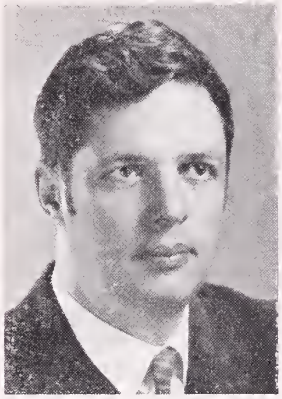
The first session of the House of Delegates will be held on Wednesday afternoon, and the final session on Saturday afternoon, August 21.

Further details concerning the 104th Annual Meeting at The Greenbrier will be announced in future issues of *The Journal.*

Cancer Teaching Day At WVU April 17

The Seventh Annual Cancer Teaching Day program will be held from 9:00 A.M. until 1:00 P.M. on Saturday, April 17, in the main auditorium of the West Virginia University Medical Center in Morgantown.

Havelock Thompson, M. D.



William A. Welton, M. D.

The guest speaker will be Anthony Shaw, M. D., of Charlottesville, Virginia. Serving as Chairman will be Alvin W. Watne, M. D., Professor of Surgery at WVU; Chairman of the West Virginia State Medical Association's Cancer Committee, and Charleston Foundation Professor of Cancer Research.

The Charleston Foundation, the Medical Association Cancer Committee and the West Virginia Division of the American Cancer Society will sponsor the April 17 program, which will center about pediatric tumors.

Others who will speak will include Havelock Thompson, M. D.; Karl D. Bowers, Jr., M. D.; William A. Welton, M. D., and Barbara Jones, M. D., all members of the WVU faculty.

Registration for the program, for which there will be no fee, will begin at 8:30 A. M. on April 17. Application has been made for four hours of Category One credit by the American Academy of General Practice, Doctor Watne announced.

Physician-Superintendent Sought At Monroe Home for Elderly

In a pleasant rolling and rural area of Monroe County sits an institution that seldom receives attention and one that few West Virginians perhaps even know exists. Because it is located in a remote area, and receives relatively little public attention, the facility is having trouble finding a doctor.

The Andrew S. Rowan Memorial Home, a residential facility for the aged, is located at Sweet Springs, approximately 20 miles east of Union. Under the supervision of the Commissioner of Public Institutions, it is the home of 276 of West Virginia's senior citizens.

This beautiful farming facility takes only those persons who are 65 and over, and who have been residents of West Virginia for over a year. The home accepts both those persons able to pay for their care and those who are referred by Department of Welfare officials in the counties in which the senior citizens reside.

This facility is designed as a home and does not function as a hospital, sanitarium or nursing home. To be admitted there, a person must be able to take care of his own personal needs—to be able to dress and undress himself and walk to a central dining room. A medical examination and chest x-ray also are required before admittance.

Currently, there is a physician from Lewisburg who visits the institution once a week, but this does not represent adequate service. With almost 300 persons age 65 and over, a full-time doctor to serve as a superintendent is a "must," state officials and others believe.

The superintendent would enjoy first-class accommodations. He would be provided an attractive colonial home in this peaceful setting; and he could have a part-time medical practice in Union if he desired. There is only one other physician in Monroe County at this time.

This job would be the ideal situation for a doctor who is desiring to slow down his practice, but doesn't want to retire, state spokesmen have emphasized.

Andrew S. Rowan Memorial Home, formed by an act of the Legislature in 1945, is situated on a 685-acre tract of land with about 485 acres in woodland and approximately 200 acres under cultivation. The staff numbers around 55 and there are cottages for the residential employees.

The home has a herd of 60 Holstein cows to supply all the milk needed, and a great deal of the food consumed by those living there is raised in the gardens.

Doctors interested in this position should contact B. B. Richmond, M. D., 125 Granville Avenue, Beckley 25801.

Conference on Air Pollution 'First' in Medical Area

Despite heavy snow, icy roads and freezing tempertures, some 200 professional and other persons attended the two sessions of the Fourth Mid-Winter Conference on Chest Diseases January 30 and 31 in Charleston. The program took the form of a Symposium on Air Pollution.

About 125 individuals, including representatives of several Kanawha and Ohio Valley industrial concerns, took part in the Saturday afternoon, January 30, program for the general public at Morris Harvey College.

Seventy-five physicians, nurses and others were present for the Sunday, January 31, scientific sessions at the Daniel Boone Hotel.

The Conference, for which Drs. Joseph T. Skaggs and Ralph E. Nestmann of Charleston again served as Co-Chairmen, was a pioneer effort by the medical profession and other cooperating groups both in the subject matter presented and the approach which was used.

The Saturday and Sunday programs were designed to identify various kinds of air pollutants and their effects on health; and how topographical and meteorological conditions enter into West Virginia's air pollution problems.

Frank W. Barton, an attorney and Director of the American Medical Association's Environmental Health Department, was among those who called the program a "first" for state and local medical societies, although the AMA sponsored an Air Pollution Medical Research Conference in New Orleans, Louisiana, in October. Mr. Barton came to Charleston from Chicago for the Sunday program.

Industrial representatives at the Saturday program called it unique in that it provided new information, from the medical standpoint, about health problems as a basis for various efforts to control pollution.

The faculty for the program included:

Bertram W. Carnow, M. D., Associate Professor of Preventive Medicine and Community Health and Chief of the Section of Environmental Health, University of Illinois College of Medicine, Chicago.

Carl M. Shy, M. D., Chief, Epidemiology Section, U. S. Environmental Protection Agency, Durham, North Carolina.

Ronald E. Engel, D.V.M., Ph. D., Assistant Director, Bureau of Criteria and Standards, for the EPA in Durham.

John Rankin, M. D., Professor and Chairman, Department of Preventive Medicine, University of Wisconsin Medical School, Madison.

Stephen M. Ayres, M. D., Associate Attending Physician, Department of Medicine, New York University Medical Center, New York City.

Bertram W. Carnow, M. D., of Chicago answers a question from the audience during the Saturday, January 30, session for the general public presented as a part of the Fourth Mid-Winter Conference on Chest Diseases. The program represented a Symposium on Air Pollution.

Paul A. Humphrey, meteorologist and Chief, Atmospheric Sciences Branch, in the Environmental Protection Agency's Raleigh, North Carolina, offices.

Director Carl G. Beard and Philip Zinn, meteorologist, of the West Virginia Air Pollution Control Commission.

Dr. Charles E. Andrews, Provost for Health Sciences at the West Virginia University Medical Center, and Dr. William K. C. Morgan, Professor of Medicine at WVU, served in moderator and discussion leader roles for the meeting.

Those sponsoring or cooperating in the Conference included the West Virginia Thoracic Society; West Virginia State Medical Association; the WVU Medical Center; the West Virginia Tuberculosis and Respiratory Disease Association; the West Virginia Regional Medical Program; the Charleston Area Office of WVU's Appalachian Center; the Kanawha Medical Society, and the Anti-Tuberculosis League of Kanawha County.

New Association Members

Dr. A. M. Behnam, 2401 South Kanawha Avenue, Beckley (Raleigh). Doctor Behnam, a native of Egypt, received his M. D. degree in 1951 from the Cairo Faculty of Medicine. He interned and served a residency at the Medical College of Virginia and served as a research associate at the Oregon University School of Medicine, 1958-60. His specialty is urology.

* * * *

Dr. Lucia P. Banquis, Greenbrier Valley Hospital, Ronceverte (Greenbrier Valley). A native of the Philippines, Doctor Banquis received her M. D. degree in 1962 from the University of Santo Tomas. She interned at Perth Amboy General Hospital in New Jersey and served residencies at Euclid Glenville Hospital and St. John's Hospital. Her specialty is internal medicine.

* * * *

Dr. F. R. Barrera, P. O. Box 1112, Fairmont (Marion). A native of the Philippines, Doctor Barrera received his M. D. degree in 1960 from the University of Santo Tomas. He interned at Elizabeth General Hospital in New Jersey and served residencies at the Bronx Hospital in New York, and VA Hospitals in Boston and Orange, New Jersey. His specialty is internal medicine.

* * * *

Dr. E. G. Cadogan, 1212 Locust Avenue, Fairmont (Marion). A native of Paraguay, Doctor Cadogan received his M. D. degree in 1960 from the Universidad Nacional Asuncion. He interned at Charleston General Hospital and served a residency at WVU Hospital. His specialty is ophthalmology.

* * * *

Dr. Domingo Tan Chua, 1200 Harrison Avenue, Elkins (Tygart's Valley). A native of the Philippines, Doctor Chua received his M. D. degree in 1962 from the University of Santo Tomas. He interned at McLaren General Hospital in Flint, Michigan, and served residencies at that hospital and the Francis Delafield Hospital in New York. He also served as a Fellow at Memorial Sloan Kettering Cancer Institute. His specialty is urology.

* * * *

Dr. Clemente Diaz, 25 Oakford Avenue, Richwood (Central W. Va.). A native of Mexico, Doctor Diaz received his M. D. degree in 1959 from the National University of Mexico. He interned at Missouri Baptist Hospital in St. Louis and served residencies at that hospital and the Missouri Pacific Hospital. His specialty is general surgery.

* * * *

Dr. Janelle B. Duremdes, Southern W. Va. Regional Health Council, Route 2, Box 382, Bluefield (Mercer). A native of the Philippines, Doctor Duremdes received her M. D. degree in 1960 from Far Eastern University. She interned at St. Elizabeth, New Jersey, and served a residency at Fordham Hospital in Bronx, New York. Her specialty is pediatrics.

* * * *

Dr. Ernesto Fabi, Wyoming General Hospital, Mullens (Wyoming). A native of the Philippines, Doctor Fabi received his M. D. degree in 1962 from the Far Eastern University. He interned at Mt. Sinai Hospital and served residencies at Columbia Hospital in Pittsburgh and St. Mary's Hospital in Troy, New York. His specialty is general surgery.

* * * *

Dr. Jamal H. Khan, Beckley Medical Arts, 2401 S. Kanawha Street, Beckley (Raleigh). A native of India, Doctor Khan received his M. D. degree in 1961 from King Edward Medical College in Pakistan. He interned at Highland Park General Hospital in Highland Park, Michigan, and served residencies at Appalachian Regional Hospital in Beckley and North Carolina Baptist Hospital in Winston-Salem. His specialty is surgery.

* * * *

Dr. Mack I. McClain, 1000 Locust Avenue, Fairmont (Marion). A native of Oklahoma City, Oklahoma, Doctor McClain was graduated from Oklahoma State University and received his M. D. degree in 1962 from the University of Oklahoma School of Medicine. He interned and served a residency at the University of Texas Medical Branch in Galveston. He served as a Major in the Medical Corps of the United States Army, 1966-69, and his specialty is radiology.

* * * *

Dr. Jorge J. San Pedro, 600 East McDonald Avenue, Man (Logan). A native of Cuba, Doctor San Pedro received his M. D. degree in 1954 from the Havana University School of Medicine. He interned at a hospital in Cuba and served residencies at several hospitals in the United States. He previously was located in Plant City, Florida, and his specialty is general surgery.

* * * *

Dr. Tara Sharma, 800 First Huntington National Bank Building, Huntington (Cabell). A native of India, Doctor Sharma received his M. D. degree in 1960 from the Glancy Medical College in India. He interned and served a residency at Washington Hospital Center in Washington, D. C. He also had three years training at the Memorial Sloan Kettering Institute for Cancer in New York City. His specialty is urology.

* * * *

Dr. Jose J. Ventosa, 311 10th Street, Glen Dale (Marshall). A native of the Philippines, Doctor Ventosa received his M. D. degree in 1964 from the University of Santo Tomas. He interned at McKeesport Hospital in McKeesport, Pennsylvania, and served residencies at the University of Nebraska Hospital and Jersey City Medical Center. His specialty is pediatrics.

Winter Meeting of the Council In Charleston on Jan. 24

The Winter Meeting of the Council was held at The Daniel Boone in Charleston on Sunday, January 24, with the Chairman, Dr. Maynard P. Pride of Morgantown, presiding.

Dr. Worthy W. McKinney, Chairman of the Medical Economics Committee, presented a report on the medical programs of the Department of Welfare, Workmen's Compensation Fund and the Division of Vocational Rehabilitation. He said that he and Dr. Buford W. McNeer of Hinton, Chairman of the Rehabilitation Committee, had met recently with Vocational Rehabilitation Director Thorold S. Funk to discuss the Division's medical program. He reported that Mr. Funk was still looking for two physicians to fill the positions of Medical Director and Clinical Director. Also, he said the Division was looking into the possibility of hiring a physician on a part-time basis.

Doctor McKinney said other subjects discussed included the Division's fee schedule, overlapping of services between the various medical programs and the need for better screening of clients by the Division.

He reported that officers of the Association and members of the Committee were making every effort possible to support the Department of Welfare's request for additional funds in order to provide services at the present level.

Election of Honorary Member

Dr. James E. Fisher of New Cumberland was elected to honorary membership in the State Medical Association.

Doctor Woodard Guest at Meeting

Dr. Prince B. Woodard, Chairman of the West Virginia Board of Regents, appeared before the Council to discuss a plan for the establishment of a State system of comprehensive community colleges as a part of the higher educational system of West Virginia.

Doctor Woodard said the Board of Regents was concerned over the limited number of higher educational opportunities of less than the baccalaureate degree level available to high school graduates and adults in the State. He said that the Board would ask the Legislature to authorize such a study as the need for continuing education is greater now than ever before.

He said that establishment of community colleges would not require construction of new buildings as existing and unused facilities would be utilized.

Report of Legislative Committee

Dr. Frank J. Holroyd of Princeton, Chairman of the Legislative Committee, reported that the Committee had met in Charleston the prevous day. He said that an unusually large number of bills of interest to the medical profession had been introduced early in the 1971 session of the West Virginia Legislature.

Following the report of Doctor Holroyd, the Council voted to actively support the following bills:

A bill which would make it mandatory that all children entering school for the first time be tested to see that they do not have tuberculosis. Also, all school personnel would be required to have such tests annually. Positive reactors to the skin tests would have to be x-rayed immediately and annually thereafter.

A bill which would permit one or more professional persons to form professional service corporations. The present law requires two or more physicians.

A bill which would permit persons 18 years of age or older to make blood donations without their parents' permission or authorization.

A bill which would enable physicians to examine, diagnose and treat any minor who has or is suspected of having a venereal disase without the knowledge and consent of the minor's parent or guardian.

A bill which would permit the Medical Licensing Board to set up rules and regulations governing the employment of physician's assistants. The bill would not require licensing of such assistants but would require certification and approval of a job description by the Board and establishment of qualifications of employment as a physician's assistant.

A bill which would provide that the furnishing and transfusing of blood, blood plasma, blood products or blood derivatives or the furnishing or transplanting of corneas, bones, or organs or other human tissues are the rendition of a service and not a sale, and that no warranties shall be applicable.

A bill which would permit qualified foreign physicians who are permanently licensed in other states to be accepted by the Medical Licensing Board by reciprocity when the provisions required by all applicants for reciprocity have been met. Present law requires graduates of foreign medical schools to take the FLEX examination in order to be licensed.

A bill to permit sterilization by vasectomy or salpingectomy of certain citizens, and to remove from the West Virginia Department of Health to the courts the responsibility of authorizing such surgical procedures upon incompetent or insane persons.

Doctor Holroyd reported that a number of bills relating to drugs had been introduced the first week of the session. The Council voted to support the principle of all the bills which would help to combat the current problem of drug abuse.

The following members of the Council were present: Dr. Maynard P. Pride of Morgantown, Chairman; Dr. George R. Callender, Jr., of Charleston, President; Dr. Harry S. Weeks, Jr., of Wheeling,

President Elect; Dr. Worthy W. McKinney of Beckley, Vice President; Dr. Kenneth G. MacDonald of Charleston, Treasurer; Dr. Richard W. Corbitt of Parkersburg, Councilor at Large; Dr. Richard V. Lynch, Jr., of Morgantown, Junior Councilor; and Drs. Stephen Ward, Wheeling; William T. Lawson, Fairmont; George A. Curry, Morgantown; Robert R. Pittman, Martinsburg; Carl A. Liebig, Keyser; A. Kyle Bush, Philippi; Joseph B. Reed, Buckhannon; F. Lloyd Blair, Parkersburg; Jack Leckie, Huntington; A. Thomas McCoy, Charleston; Richard G. Starr, Beckley; John J. Mahood, Bluefield; and Thomas P. Long, Man.

The meeting also was attended by Dr. Frank J. Holroyd of Princeton, AMA Delegate; Dr. Richard E. Flood of Weirton, AMA Delegate; Dr. Thomas G. Reed of Charleston, AMA Alternate; Dr. Albert C. Esposito of Huntington, AMA Alternate; Dr. James S. Klumpp of Huntington, Parliamentarian; Dr. N. H. Dyer of Charleston, Director of the State Health Department; Dr. Mildred M. Bateman of Charleston, Director of the Department of Mental Health; Dr. Charles E. Andrews of Morgantown, Provost of Health Sciences at WVU Medical Center; Dr. Hu C. Myers of Philippi; Mr. William H. Lively of Charleston, Executive Secretary; and Mr. Charles R. Lewis of Charleston, Executive Assistant.

Dinner Marks 87th Birthday Of Clarksburg Physician

With members of his staff handling the arrangements, Dr. B. S. Brake, Director of the Harrison-Clarksburg Health Department, was honored with a social hour and dinner on his 87th birthday January 20. About 75 friends and associates were present.

A native of Jane Lew in Harrison County, Doctor Brake launched his professional career as a school teacher, and was principal of a school in Clarksburg at the age of 16.

He received a doctor of dental surgery degree in 1911 from the University of Pennsylvania in Philadelphia, then was awarded an M. D. degree in 1917 from the Medical College of Virginia in Richmond.

After interning at Riverside Hospital, French Hospital and Bellevue Hospital, all in New York City, he went into practice in Clarksburg in 1921. He continued as a physician and surgeon until 1950.

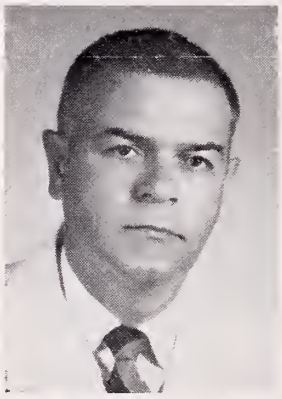
He entered the area of public health in 1950 as a district officer, then became head of the Harrison-Clarksburg Health Department in 1953.

Need a New Auto Emblem?

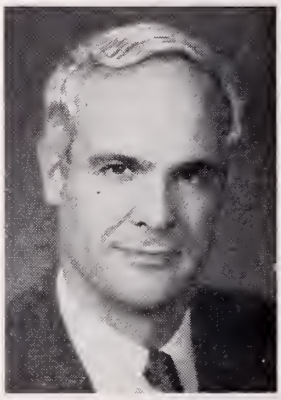
A supply of auto emblems, bearing the insignia of the West Virginia State Medical Association, is kept on hand at all times at the headquarters offices in Charleston. The price of each emblem is $5.00 postpaid.

Ophthalmology, Otolaryngology Speakers, Topics Announced

A number of prominent out-of-state physicians will speak at sessions of the National Spring Meeting sponsored by the West Virginia Academy of Ophthalmology and Otolaryngology April 14 to 17 at the Greenbrier Hotel in White Sulphur Springs.



Donald A. Shumrick, M. D.



David Paton, M. D.

Dr. J. Elliott Blaydes, Jr., Secretary-Treasurer of the Academy, said that hotel reservations for the meeting should be made directly with the Greenbrier.

Checks for the registration fee, which is $60, should be made payable to the West Virginia Academy of Ophthalmology and Otolaryngology, and addressed to Doctor Blaydes at 107 Federal Street, Bluefield 24701.

Here are the speakers, and their topics, in the general subject area of Ophthalmology:

John W. Chambers, M. D., Baltimore, Maryland, "Unilateral Optic Nerve Involvement—Optic Neuritis Versus Optic Nerve Compression," and "Orbital Tumors—A Neurosurgical View Point."

David Paton, M. D., Baltimore, "Factors Affecting the Changing Prognosis of Corneal Surgery," and "Incision and Wound Closure for Cataract Surgery."

A. Benedict Rizzuti, M. D., New York, New York, "Indications and Surgical Techniques of Prosthokeratoplasties," and "Management of Shallow Anterior Chamber in Intractible Glaucoma Following Cataract Surgery."

Robert C. Welsh, M. D., Miami, Florida, "Recent Advances in Cataract Surgery," and "Recent Advances in Aphakic Correction—By Spectacle and Contact Lenses."

Speakers and topics in Otolaryngology will include:

Richard J. Belluci, M. D., New York, New York, "Basic Considerations for Success in Tympanoplasty," and "The Malleus—Stapes Wire, Total Defect Skin Graft."

Cary N. Moon, Jr., M. D., Charlottesville, Virginia, "Nystagmus and Nystagmography," and "Menieres Disease."

Carl N. Patterson, M. D., Durham, North Carolina, "Septal Reconstruction With and Without Rhinoplasty," and "Diagnosis and Treatment of Juvenile Angiefibroma."

William H. Saunders, M. D., Columbus, Ohio, "The Use of Forehead and Chest Flaps in Reconstructive Surgery About the Head and Neck," and "Latest Concepts in Mastoidectomy and Tympanoplasty Surgery."

Donald A. Shumrick, M. D., Cincinnati, Ohio, "Physiologic and Cosmetic Rehabilitation of the Head and Neck Cancer Patient," and "Head and Neck Trauma and the Automobile."

Doctors, Nurses from Panama Trained by Health Agency

West Virginia's State Department of Health played a major role, early in March, in a training program for a group of physicians and nurses from Panama.

"This is our third venture in this field," Dr. N. H. Dyer, State Director of Health, explained. "The first involved a group of medical officers from Brazil, and we later trained a group of medical officers from nine Asiatic countries in family planning."

The new training was scheduled for March 3 through 6, and Doctor Dyer added that "we are pleased that the West Virginia State Health Department was chosen to participate in this international program."

Directors and other personnel in the Department's various divisions conducted the training, which covered program activities for which the health agency is responsible as well as special projects and clinics in operation in the Charleston area, and in Clay County.

MLB Licenses 10 Physicians To Practice in State

The Medical Licensing Board of West Virginia licensed by reciprocity the following 10 physicians to practice in the State of West Virginia at a meeting held at The Capitol in Charleston on January 11, 1971:

Cook, James Ralph, Rockville, Md.
Covey, Thomas Harvey, Weston
Godfrey, James Timothy, Bluefield
Hall, Russell Phillip, Huntington
LeFevre, Philip Joseph, Wheeling

McMillan, William Owen, Charleston
Morgan, Walter Albert, Morgantown
Van Pelt, Byron Leslie, Petersburg, Va.
Yost, Jeffrey Marshall, Wheeling
Okeon, Melvyn Mayer, Parkersburg

The next meeting of the MLB will be held at The Capitol in Charleston on April 5, 1971, for the purpose of licensing physicians by reciprocity and temporary licensure to practice medicine in the State of West Virginia.

Doctor Flink Chosen to Head New AMA Section Council

Dr. Edmund B. Flink of Morgantown has been elected Chairman of the American Medical Association's newly formed Section Council on Internal Medicine.

Edmund B. Flink, M. D.

Doctor Flink is Chairman and Professor of Medicine at the West Virginia University School of Medicine, and also is Governor of the West Virginia Chapter, American College of Physicians.

Twenty-three new section councils become operable within the AMA structure on January 1, 1972, and that on internal medicine became the third to elect its officers.

Officers of 20 others will be chosen at organizational meetings during the next few months.

CORRECTION

The caption beneath the "Looking Back 10 Years" picture in the news section of the February issue of The Journal incorrectly indicated that Dr. Charles E. Staats of Charleston is deceased. Doctor Staats still is actively engaged in medical practice in Charleston, and was quick to inform us that he is currently serving as President of the Charleston Figure Skating Club. The Journal deeply regrets this error and apologizes for any embarrassment or inconvenience which it has caused.

Hinton Scholarship Campaign Honors Dr. J. W. Stokes

The Hinton Rotary Club has established a scholarship fund in honor of Dr. J. W. Stokes, who has practiced in that Summers County community for almost half a century.

Several years ago, the Hinton athletic field was named Stokes Stadium after the Springfield, South Carolina, native who has served as physician for Hinton High School teams for more than 25 years.

Doctor Stokes was graduated from Vanderbilt University's School of Medicine in Nashville, Tennessee, in 1924. He is a former Secretary and President of the Summers County Medical Society.

At the same meeting at which the Rotarians launched the scholarship fund by unanimous vote, members contributed almost $300. The club said it will sponsor various kinds of events to raise additional money.

Improved Communications Goal Of Teaching Hospitals

West Virginia's Joint Council on Teaching Hospitals has set into motion two programs to improve communications in the state's general area of medical education.

One is designed to bring directors of medical programs in West Virginia hospitals into closer contact with their professional counterparts at the West Virginia University Medical Center.

The other involves new efforts to learn from those completing residency training what desires or interests they have toward practice in West Virginia; and to put them in touch with the state's physicians.

Implementing a directive the Council gave it at a December meeting, the teaching hospitals unit's Executive Committee has sent letters to more than 25 medical program directors at its member institutions.

Those directors are on staffs of community hospitals where fourth-year medical students at West Virginia University now spend varying periods of time under the Selective Experience Program instituted last July.

Information available to the Council from WVU, the participating hospitals and the students has indicated an overwhelming acceptance of the program, and plans to broaden and further improve it are under way.

The Joint Council membership agreed in December that one step which appeared desirable involves closer communications between the hospitals where the students are assigned for their extramural experience, and WVU.

The letters to the hospital program directors accordingly have suggested that they invite their WVU counterparts—either the intramural faculty members or department heads, or both—to visit the hospitals when fourth-year students are there.

"If it is not convenient for such visits to be arranged when students are actually at the hospitals, perhaps they could be scheduled on certain other dates mutually agreeable to the parties involved," the Council's letter suggested.

The Council also provided each of the program directors with a listing of intramural faculty members and department heads at WVU to help them in arranging such visits.

The Council's new contacts with those completing residency training were instituted in letters addressed by Executive Secretary William H. Lively of the West Virginia State Medical Association to 29 doctors at six hospitals in the state.

All of the 29 will complete residency training this year, generally at the end of June. Plans call for similar new contacts, on a continuing basis, with others in residency training who are alumni of the West Virginia University School of Medicine or otherwise known to the faculty there.

"We . . . would like to know if you have plans, or a desire, to practice in West Virginia," the letters explained. "If so, we would be happy to make our resources, including *The West Virginia Medical Journal,* available to help you in any way you might desire." The letters added:

"It is our plan to carry in the *Journal* on a generally regular basis—without charge, of course—information about those physicians who are completing their training and are ready to enter private or other practice. We feel there are many opportunities for physicians in West Virginia that perhaps have not really been understood."

The letters asked those with interests in West Virginia to provide any information they might desire about their medical school and specialty training; the kind of community practice settings they have been considering, and other family and personal data they consider pertinent.

The letter further noted that the Association's headquarters has enjoyed success in obtaining good practice oportunities for physicians who have permitted it to circulate copies of their complete biographical sketches to a large number of those in the medical profession in the state.

"If you would like to take advantange of this service, please send along a biographical sketch and we will see that it reaches interested parties in West Virginia," the letter promised.

Requests for Heart Research Grants Due by April 1

Investigators working in the cardiovascular field may apply for a grant-in-aid from the West Virginia Heart Association, according to Michael Wilson, M. D., Morgantown, Research Committee Chairman. The deadline for receiving applications for the grants will be April 1.

Although no maximum grant has been established, individual requests should not exceed $3,000. Grants are not restricted to any particular discipline but the investigator must be qualified and have the facilities available to pursue his work.

Each year, grants are awarded by the West Virginia Heart Association to scientists and physicians who need interim or supplementary support for ongoing projects, or to those who wish to demonstrate by pilot experiments the value of a new project. The program in West Virginia is supported by the Heart Fund, but is separate from the research program of the American Heart Association.

Additional information about the program and applications may be obtained by writing to Mr. Richard J. Bates, Executive Director, West Virginia Heart Association, 211 35th Street, S. E., Charleston, West Virginia 25304.

Tuberculosis Still Considered Major Health Problem

Few persons realize the time and dedicated effort provided daily to control tuberculosis in West Virginia, Dr. N. H. Dyer, the State Health Director, explains. Many persons falsely believe, Doctor Dyer adds, that tuberculosis no longer represents a serious threat to the State's health and welfare. Early figures show, however, 477 new tuberculosis cases reported during 1970. These, along with 3,081 tuberculosis patients currently under medical supervision and the 61 deaths in 1970, indicate the disease is still a major health problem.

The Department of Health's Bureau of Tuberculosis Control has the key role in dealing with this problem. The fact that patients must remain under medical supervision and submit to periodic examinations for at least five years increases the responsibility placed on the tuberculosis control program.

Doctors, nurses, health administrators, laboratory personnel, x-ray technicians, and clerks employed by the State Department of Health work in their respective areas to insure that these objectives are met.

Physicians located throughout West Virginia are paid on a fee-for-service arrangement to provide diagnostic, treatment, and consultative services to tuberculosis patients, persons exposed to tuberculosis and persons with x-rays or skin tests indicative of tuberculosis. These services include examinations, x-rays, interpretation of x-rays, treatment recommendations, and medical advice. During 1970, 5,804 patients received these services during 391 diagnostic clinic sessions. Drugs were provided for 2,594 patients.

A nurse is present at each diagnostic clinic session to provide services to the patient, and to assist the physician. Nurses interview new patients to obtain contact information; serve as consultants to these patients and their families; insure that tuberculosis contacts and suspects are placed under medical supervision; conduct tuberculin skin testing programs, and insure that known tuberculosis patients remain on treatment and receive the necessary examinations.

During fiscal 1970, 363 patients were interviewed; 3,220 contacts were placed under medical supervision; 947 suspects received x-rays and examinations, and approximately 93,000 tuberculin skin tests were given and read. Surveillance was maintained over the 3,081 infected patients under medical supervision, and action was taken to insure that they followed medical recommendations to reduce the possibility of having their disease reactivate.

Through a cooperative agreement with the State Hygienic Laboratory, microbiologists are employed to test sputum samples for tuberculosis patients and suspects to determine if the tuberculosis germ is present. These tests are important to tuberculosis control because they identify persons who are capable of transmitting tuberculosis to others; persons who are not responding to treatment, and persons with chest diseases caused by other germs.

Approximately 14,800 sputum samples were processed in 1970, using the procedure usually taking from four to six weeks. When the tuberculosis germ is identified, additional tests are performed to determine if it is susceptible to certain drugs. This service enables physicians to select drugs which will control or kill the organism.

Dr. George R. Callender, Jr., of Charleston (left), President of the West Virginia State Medical Association, installed the Kanawha Medical Society's new officers at the Kanawha group's annual dinner-dance in Charleston on January 30. The affair attracted 170 members and their guests, including speakers and others in the city to participate in the Fourth Mid-Winter Conference on Chest Diseases. Others in the photo above, from the left, are Dr. George W. Hogshead of Nitro, the Kanawha Society's Secretary-Treasurer; Dr. W. Alva Deardorff of Charleston, President; and Dr. Jimmie L. Mangus, also of Charleston, Vice President.

West Virginia Physicians Honored By College of Cardiology

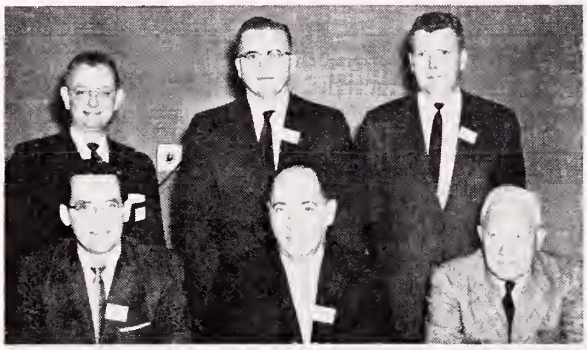
Two physicians from the West Virginia University Medical Center, and four others from the state, were among those honored February 6 at a convocation climaxing the 20th Annual Scientific Session of the American College of Cardiology in Washington, D. C.

Fellowships in the College were conferred on Dr. Robert J. Marshall, Professor of Medicine and of Physiology and Biophysics at WVU; Dr. Thomas J. Tarnay, Associate Professor of Surgery at WVU, and Drs. Magdi S. Azer and Harold Selinger, both of Charleston.

Included in the new group of Associate Fellows were Drs. Dong Kyu Chung and William H. Jacobs, both of Clarksburg.

Governor of West Virginia for the College, and a Fellow in the organization since 1967, is Dr. Edward K. Chung, Professor of Medicine (Cardiology) at WVU. During the sessions, Doctor Chung participated in a discussion on "Use and Abuse of Digitalis," and presented a paper entitled, "Aberrant Atrial Conduction—Unrecognized Electrocardiographic Entity."

Looking Back 10 Years . . .



These were the officers of the West Virginia Chapter of the American College of Surgeons in 1961. Elected at the Greenbrier in April of that year, they are (seated): Dr. Jack C. Morgan of Fairmont, Secretary-Treasurer; Dr. Victor S. Skaff of Charleston, President; and Dr. John O. Rankin of Wheeling, Governor of the Chapter. Standing: Dr. Kenneth G. MacDonald of Charleston, Councilor; Dr. Ray E. Burger of Welch, retiring President; and Dr. William D. McClung of Charleston, Councilor.

Medical Students' Program At WVU on April 2

A special invitation has been extended to practicing physicians to attend the sixth annual Medical Student Research Convocation April 2 at the West Virginia University Medical Center in Morgantown.

The program is scheduled from 1:30 until 5:00 P.M. in the Center Auditorium.

WVU medical students will present results of their research to fellow students, faculty and practitioners. The reports will be judged for excellence by a committee on the basis of the abstracts, presentations and the projects themselves.

The Edward J. Van Liere medal and a cash prize will be awarded for the most outstanding presentation. Cash prizes also will be awarded for second and third places.

April Cardiac Pacing Seminar Set for Williamsburg

A Seminar in Cardiac Pacing April 16 and 17 at the Hilton Inn, Williamsburg, Virginia, will emphasize basic concepts and advances in cardiac pacemaking therapy.

Sponsored by the American College of Cardiology and the Medical College of Virginia, the one and one-half day meeting will offer three sessions in principles of pacemaker therapy; chronic pacing, and temporary pacing.

The registration fee will be $50 for members of the American College of Cardiology, and $75 for non-members. Advance registration should be made with Miss Mary Anne McInerny, Director, Department of Continuing Education Programs, American College of Cardiology, 9650 Rockville Pike, Bethesda, Maryland 20014.

Medical Meetings

The following is a partial list of national, state and district medical meetings scheduled in the coming months.

1971

March 4-6—Sou. Soc. of Anes., Houston.
March 6-11—Am. Acad. of Orth. Surg., San Francisco.
March 14-18—Am. Col. of Allergists, San Francisco.
March 24-26—Am. Surg. Assn., Boca Raton, Fla.
March 26-28—Am. Soc. of Int. Med., Denver.
March 28-April 2—ACP, Denver.
March 29-April 3—Am. Col. of Rad., St. Louis.
April 2-3—AMA Cong. on Socio-Economics of Health Care, Las Vegas.
April 14-17—Am. Gyn. Soc., Phoenix.
April 14-17—W. Va. Acad. of Oph. and Otol., White Sulphur Springs.
April 18-22—Am. Assn. of Neu. Surg., Houston.
April 24-25—W. Va. Conf. on Med. Educ., Charleston.
April 26—May 1—Am. Acad. of Neurology, New York.
April 26-28—Am. Assn. for Thoracic Surg., Atlanta.
April 28-May 1—W. Va. Chap., ACS, White Sulphur Springs.
April 28-May 1—Am. Ped. Soc., Atlantic City.
April 29-May 2—W. Va. Chap., AAGP, Wheeling.
May 1-5—Am. Psy. Assn., Washington.
May 3-7—Am. Col. of Ob. & Gyn., San Francisco.
May 10-14—Ohio Medical, Columbus.
May 16-19—Am. Thoracic Soc., Los Angeles.
May 16-20—Am. Derm. Assn., Sky Top, Pa.
May 16-20—Am. Urol. Assn., Chicago.
June 17-18—Am. Rheumatism Assn., New York.
June 20-24—AMA, Atlantic City.
June 22-23—Am. Diabetes Assn., San Francisco.
Aug. 19-21—104th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.
Aug. 23-26—Am. Hosp. Assn., Chicago.
Sept. 9-11—Am. Assn. of Ob.-Gyn., Hot Springs, Va.
Sept. 13-17—Int. Conf. on Coal Workers Pneumoconiosis, New York City.
Sept. 17-18—W. Va. Heart Assn., Clarksburg.
Sept. 20-24—Am. Acad. of Oph. and Otol., Las Vegas.
Sept. 21-23—Ky. Medical, Louisville.
Sept. 23—Rural Health Conference, Jackson's Mill.
Oct. 1-8—AAGP, Miami Beach.
Oct. 3-7—Pa. Medical, Pittsburgh.
Oct. 11-14—Ind. Medical, Indianapolis.
Oct. 14-17—Va. Medical, Arlington.
Oct. 16-21—Am. Acad. of Ped., Chicago.
Oct. 16-20—Am. Soc. of Anes., Atlanta.
Oct. 18-22—ACS, Atlantic City.
Oct. 24-28—Am. Col. of Chest Phys., Philadelphia.
Nov. 3-6—Am. Soc. of Cyt., Washington.
Nov. 9-16—Am. Heart Assn., Anaheim, Calif.
Nov. 28-Dec. 1—AMA Clinical, New Orleans.
Dec. 4-9—Am. Acad. of Derm., Chicago.
Dec. 5-7—Am. Acad. of Hema., San Francisco.

1972

Jan. 24-26—Soc. of Thoracic Surg., San Francisco.
Feb. 4-12—Am. Soc. of Clin. Path. & Col. of Am. Path., Atlanta.
March 1-5—Am. Col. of Cardiology, Chicago.
March 2-4—Central Surg. Assn., Chicago.
March 6-7—Int. Acad. of Path., Chicago.
March 27-30—Southeastern Surg. Cong., Washington.

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Management of Liver Lacerations with Emphasis On Hemobilia

Siroos Gerami, M. D., and Alvin L. Watne, M. D.

An increasing incidence of liver laceration secondary to closed abdominal trauma following automobile accidents is stressed by Sparkman[12] and others. The association of a high mortality and morbidity rate with these injuries also has been mentioned. Hemobilia, or drainage of blood through the common bile duct into the upper gastrointestinal tract from the injured liver, has been infrequently reported.[11] Delayed treatment and late exploration are preventable causes of high mortality.[4]

Our experience consists of the management of 13 cases of hepatic trauma with lacerations treated at West Virginia University Medical Center from 1961 through 1964 (Table 1). Ten patients sustained blunt abdominal trauma, nine from auto accidents. Three patients had penetrating abdominal wounds which clearly involved the liver. Nine patients sustained other serious injuries in addition to the liver injury, and two patients died, a two-and-a-half-year-old girl from cerebral injuries from a fall, and a 78-year-old man from penumonia and septicemia. All of these patients were treated by suture closure with or without external drainage. T-tube drainage was done in three cases. One patient developed a subphrenic abscess.

Because of particular interest, one case is selected for more extensive discussion.

Case Report

R. G., a 46-year-old male Caucasian, was admitted to West Virginia University Medical Center on November 14, 1966, two hours after an automobile accident. On arrival, vital signs were in normal range and his only complaint was right upper quadrant pain which was worse on deep inspiration. On examination, he had abdominal tenderness localizing in the right side, no evidence of skin disruption or of abdominal disruption. There was marked hypoperistalsis. Blood pressure on admission was 130/80; two hours later his blood pressure decreased to 90/50. Paracentesis revealed intraperitioneal blood. Blood transfusion was begun and the patient was taken to the operating room. At operation, a laceration 15 cm. in length and 10 cm. in depth was found in the right lobe of the liver. This was closed with massive 0 chromic catgut sutures. Further exploration of the abdomen revealed no other injury. On exploration of the common bile duct, bile was found mixed with blood. A T-tube was inserted and saline irrigation of the common duct showed saline exuding from the laceration area. After thorough irrigation and complete hemostasis of the laceration area, two large Penrose drains were inserted and the abdomen closed.

Seven days postoperatively, the T-tube drainage decreased to between five and ten cc's. per day. The patient experienced right upper quadrant pain, the sclerae turned yellow, and direct bilirubin rose two and four-tenths mg. per cent, total to four and six-tenths. Alkaline phosphatase was nine and two-tenths K.A. units, SGPT 74 units, LDH 410 units. Liver scan showed a five by six cm. semilunar defect in the lower edge of the right lobe, near the gallbladder. T-tube cholangiogram showed extravasation into the

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liver parenchyma (Figure 1). Twenty-four hours later the T-tube drainage became bright red and the material was positively identified as blood by laboratory study. A few hours later, bleeding ceased and normal bile drainage was noted. By this time, the patient had developed melena. Shortly thereafter, his pain subsided. The serum bilirubin level decreased to normal limits within five days. The liver scan was repeated and showed a persistent defect, but this was considerably smaller in size. The remainder of his hospitalization was uneventful. A T-tube cholangiogram on December 12 appeared normal (Figure 2) and the tube was removed. The patient was discharged a few days later in good condition.

Discussion

Hemobilia is a rare complication of liver trauma. The first case of hemobilia was reported by Owens,[8] in 1848. Sandblom,[10] in 1948, however, used the term "hemobilia" for the first time. About 40 such cases have been reported in the literature, 36 of them collected by Orloff and Wright[7] in 1964. Five more cases have subsequently been reported.[1]

Hemobilia is commonly thought to be due to deep and central lacerations of the liver. Leakage and collection of blood and bile in the depths of the liver laceration, not within the reach of closure by suture, cause pressure on the hepatic cells. Accumulation of such fluids produces further necrosis and hemorrhage.[3] Bleeding is occasionally great enough to produce shock, hematemesis and melena. Pain, jaundice, increased alkaline phosphatase and transaminase may be noted if clotted blood obstructs the common bile duct. Liver scan and cholangiogram may show abnormal space defects. Arteriogram may show extravasation of the opaque material into the lacerated area. This procedure is particularly valuable in preoperative studies of extent and depth of laceration and hemobilia. Selective techniques also are extremely helpful in the operative management of deep lacerations and hepatectomy.[2] The length of time between trauma and hemobilia has been reported to vary from a few hours to a few months.

Treatment

Treatment of liver lacerations consists fundamentally of control of hemorrhage, debridement of necrotic liver tissue and adequate external drainage.[6] Further measures to prevent hemobilia have been suggested by several authors. Reinhoff[9] suggested ligation of the hepatic artery. Sparkman[12] recommended ligation of the extrahepatic arterial branch of the involved lobe.

Table 1. Liver Trauma in 13 Cases. Causes and Complications.

Case	Age	Sex	Cause of Liver Damage	Associated Injuries	No. Lacerations	Size of Laceration	Complications	Treatment
1	2½	F	Fall from roof	Head injury	1	2 x 1 cm.	Cerebral hemorrhage (Died)	.....
2	36	F	Car accident	Fx tibia rt.	1	3 x 5 cm.	.....	Exp. lap., suture closure, ext. drain
3	42	M	Car accident	Fx humerus rt.	1	3 x 6 cm.	.....	Exp. lap., suture closure, ext. drain
4	32	M	Car accident	Fx tibia lt.	2	10 x 8 cm. 3 x 6 cm.	.....	Exp. lap., suture closure, ext. drain, T-tube
5	53	M	Stab wound	.....	1	1.5 x 2 cm.	.....	Exp. lap., suture closure
6	78	M	Stab wound	Intestinal perforation	1	6 x 8 cm.	Pneumonia, septicemia (Died)	Exp. lap., suture closure, ext. drain
7	62	M	Car accident	Laceration of spleen	1	3 x 2 cm.	.....	Exp. lap., suture closure of liver and splenectomy
8	12	M	Car accident	Fx wrist rt.	1	4 x 5 cm.	.....	Exp., suture closure
9	48	M	Stab wound	.....	1	3 x 4 cm.	.....	Exp. lap., suture closure
10	26	M	Car accident	.....	1	5 x 7 cm.	.....	Exp. lap., suture closure, ext. drain
11	46	M	Car accident	Laceration of lip	1	10 x 15 cm.	Hemobilia	Exp. lap., suture closure, ext. drainage, T-tube
12	34	M	Car accident	Fx arm rt. & leg lt.	1	8 x 13 cm.	Subphrenic abscess	Exp. lap., suture closure, ext. drainage, T-tube
13	38	M	Hit by metal object	.....	1	4 x 7 cm.	.....	Exp. lap., suture closure, ext. drainage

Fig. 1. T-tube cholangiogram reveals extravasation of contrast medium into right lobe of liver.

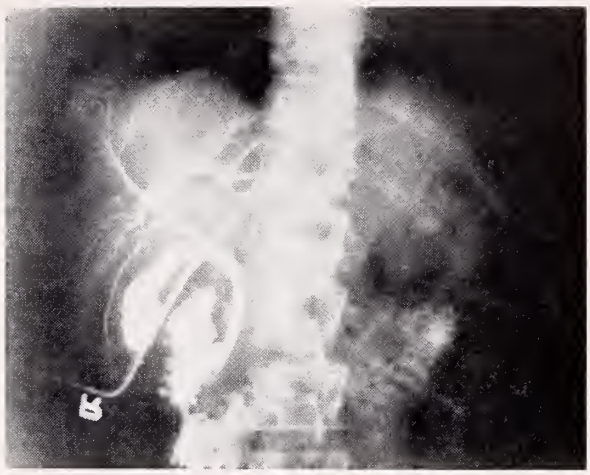

Fig. 2. T-tube cholangiogram shows normal intra- and extrahepatic biliary pattern.

Post-devitalization necrosis of the liver, infection, hepatic encephalopathy and recurrence of bleeding from accessory branches are disadvantages of these procedures. Merendino and Dillard[5] have reported good results following biliary decompression by common bile duct exploration and T-tube drainage. This is the procedure we followed, with consideration of the three fundamental principles mentioned earlier. In our case, the result was satisfactory.

Hepatic lobectomy has been suggested by Thororet.[13] This treatment has been used particularly for larger and deeper lacerations with satisfactory results. Massive resection of injured liver can be facilitated by selective angiography and direct injection of the hepatic artery at operation.[2] We are also in favor of this management and would consider selective angiography and hepatectomy for larger and deeper lacerations.

Summary

Thirteen cases of liver laceration have been reviewed in regard to cause, number and size of injuries, treatment and complications. A case of hemobilia is discussed, with a brief review of the literature. Hemobilia is a rare complication of deep, central laceration of the liver. Approximately 40 such cases have appeared in the literature. Pathogenesis, symptomatology and treatment of hemobilia are described.

References

1. Beamer, E.: Traumatic Hemobilia, Definitive Treatment with Right Hepatic Lobectomy, Am. Surgeon 5:333, 1966.
2. Freeark, R. J.: Role of Angiography in the Management of Multiple Injuries, Surg., Gynec. & Obst. 128:761, 1969.
3. Garey, L. C.: Explosion Injury of Liver from Intraparenchymal Hemorrhage, J. Trauma 1:48, 1966.
4. Madding, G. F.: 1. Injury of Liver, Arch. Surg. 70:748, 1955. 2. War Wounds of Liver, Tex. J. Med. 42:267, 1964.
5. Merendino, K. A., & Dillard, D. H.: Surgical Biliary Decompression in the Management of Liver Trauma, Surg., Gynec. & Obst. 117:285, 1963.
6. Mikesky, W. E., & DeBakey, M.: Injury of Liver in 300 Cases, Surg., Gynec. & Obst. 103:323, 1956.
7. Orloff, M. J., & Wright, P. W.: Traumatic Hemobilia, Ann. Surg. 160:42, 1964.
8. Owens, H. K.: Cause of Lacerated Liver, London Med. Gaz. 7:1048, 1848.
9. Reinhoff, W.: Discussion of Injuries of Liver. Arch. Surg. 70:756, 1955.
10. Sandblom, P.: Hemorrhage into Biliary Tract Following Trauma. Traumatic Hemobilia, Surg. 24:571, 1948.
11. Schatzki, S. C.: Traumatic Hemobilia, Ann. Surg. 160:42, 1964.
12. Sparkman, R. S.: Massive Hemobilia Following Traumatic Rupture of Liver, Ann. Surg. 138:889, 1953.
13. Thororet, G. C.: Traumatic Rupture of Liver, Severe Secondary Digestive Hemorrhage Caused by Arterial Biliary Fistula, Controlled Right Hepatectomy, Mem. Acad. de chir. 88:16, 1957.

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Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.

Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.

Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.

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Use of the Insulinogenic Index in a Community Hospital: A Preliminary Report

Stuart F. Eckmann and Steven A. Artz, M. D.

The development of the radioimmunoassay of plasma insulin has resulted in considerable interest in plasma insulin levels in normal and abnormal carbohydrate metabolism. In an attempt to define the usefulness of the insulin immunoassay in clinical medicine, the following study was undertaken.

It was our intention to determine the correlation between plasma insulin and glucose levels following oral carbohydrate administration. From such a correlation we hoped to establish clinically significant ranges for normal and abnormal insulin responses to carbohydrate loading.

The Authors

- **Stuart F. Eckmann, Research Associate, Medical Physics Laboratory, Charleston General Hospital; and Steven A. Artz, M. D., Director, Medical Physics Laboratory, and Chief, Diabetic Clinic, Charleston General Hospital, Charleston.**

Methods and Materials

Plasma insulin and glucose responses to an oral carbohydrate load were determined in 17 non-diabetic, non-obese subjects. Obesity was defined as exceeding by more than 20 per cent of the subject's ideal weight, derived from the Metropolitan Life Insurance Statistics Tables.[1] Subjects were drawn from patients at Charleston General Hospital and volunteers from hospital staff.

All subjects were placed on a high carbohydrate diet three days prior to testing. Following an overnight fast, subjects were administered seven ounces of Glucola, a commercial oral carbohydrate preparation equivalent to 75 Gm. glucose.

Venous blood was obtained in sodium fluoride tubes at fasting, one-half, one, two, three, four and five hours during the glucose tolerance test. Blood samples were refrigerated up to five hours before centrifugation. A portion of the plasma obtained was then frozen for later insulin immunoassay. The remaining plasma was immediately used to obtain glucose levels.

Glucose determinations were performed on a Technicon Autoanalyzer, using the modified Somogyi method.[2]

Plasma insulin was measured by a modification of the radioimmunoassay method of Hales and Randle.[3] The method uses insulin-I^{125}, insulin binding reagent (IAB), and crystalline insulin standards, all obtained from Amersham/Searle. The insulin binding reagent is an antiserum prepared by a double antibody method, from insulin and guinea-pigs and from guinea-pig serum proteins in rabbits.

The method depends on the competition between the insulin standards or unknowns with a small amount of tagged insulin for a limited amount of the IAB. Addition of the insulin to the IAB allows the two to combine to form insulin-antibody complexes. The reaction is reversible, i.e., the insulin-antibody complex can dissociate into the original components. When the reaction reaches equilibrium, the ratio of free insulin-antibody complex is then filtered out onto Oxoid membrane filters using a Millipore microanalysis filtration apparatus.

Radioactivity is determined using a Picker dry-well scintillation scaler. The radioactivity level is related in an inverse manner to initial untagged insulin levels. Plasma insulin values are obtained by comparison with standards.

All standards and plasma specimens were analyzed in triplicate, and a complete set of standards was included with each group of plasma samples.

It is estimated that each insulin immunoassy takes about 37 hours to complete. This estimate includes the time involved in making solutions, scintillation counting, and calculations, as well as the incubation period.

Subjects were originally divided into two groups. In order to establish a normoglycemic range, the control group, Group 1, was limited to volunteers with no hypoglycemic or hyperglycemic history, and with less than a 60 per cent genetic probability of inheriting diabetes.[4]

The second group encompassed both patients and volunteers exhibiting signs of abnormal car-

bohydrate metabolism. Subjects with hyperglycemic symptoms were drawn from individuals being given a glucose tolerance test for a possible diabetic condition. The remainder of this group demonstrated one or more of the following hypoglycemic symptoms: shaking, sweating, hunger, or weakness a few hours after a meal; headache, visual disturbances, or lethargy.

The second group was further divided into two sub-groups on the basis of the response to the glucose tolerance test. Subjects exhibiting hypoglycemic behavior, a drop in blood glucose levels to or below the fasting level between two and

Table 1.

Plasma Glucose and Insulin Responses to An Oral Carbohydrate Load—Group 1

Legend: Insulin = Microunits Insulin/cc
Glucose = mg. Glucose/100 ml.

$$I/G = \frac{\text{Microunits Insulin/cc}}{\text{mg. Glucose/100 ml.}}$$

Patient	Value	Fasting	½ hr	1 hr	2 hr	3 hr	4 hr	5 hr	Age
RC	Insulin	12.0	35.5	24.0	19.0	25.5	11.0	10.0	51
	Glucose	85	130	95	100	100	75	85	
	I/G	.14	.27	.25	.19	.26	.15	.12	
SE	Insulin	16.0	23.5	23.0	20.0	17.0	18.0	15.0	22
	Glucose	90	120	120	90	70	85	95	
	I/G	.17	.195	.19	.22	.24	.21	.16	
NBD	Insulin	19.0	56.5	45.0	51.5	43.0	15.5	15.0	21
	Glucose	90	140	130	110	90	85	90	
	I/G	.21	.40	.346	.468	.47	.18	.166	
MG	Insulin	4.0	35.0	30.0	15.0	10.0	5.0	4.5	39
	Glucose	90	125	120	95	90	85	95	
	I/G	.044	.28	.25	.25	.11	.059	.05	
PMcC	Insulin	7.0	21.0	17.0	13.0	14.0	7.0	5.0	33
	Glucose	85	115	105	75	90	75	70	
	I/G	.08	.18	.16	.17	.16	.09	.07	
JMcC	Insulin	7.0	20.0	16.0	29.0	10.0	5.0	5.0	12
	Glucose	90	110	95	110	80	75	85	
	I/G	.08	.18	.17	.26	.13	.07	.06	
BB	Insulin	17.0	23.0	54.0	27.0	51.0	19.0	15.0	43
	Glucose	80	135	135	105	125	80	80	
	I/G	.21	.17	.40	.26	.41	.24	.19	
SP	Insulin	15.0	27.0	36.0	14.0	20.0	22.0	13.0	32
	Glucose	95	150	140	110	70	75	80	
	I/G	.16	.18	.26	.13	.28	.29	.16	

Table 2.

Plasma Glucose and Insulin Responses to An Oral Carbohydrate Load—Group 2

Legend: Insulin = Microunits Insulin/cc
Glucose = mg. Glucose/100 ml.

$$I/G = \frac{\text{Microunits Insulin/cc}}{\text{mg. Glucose/100 ml.}}$$

Patient	Value	Fasting	½ hr	1 hr	2 hr	3 hr	4 hr	5 hr	Age
JL	Insulin	16.5	87.0	110.0	76.0	19.0	13.5	11.5	22
	Glucose	90	155	130	110	75	85	80	
	I/G	.18	.56	.85	.69	.25	.16	.14	
JW	Insulin	43.5	90.0	76.0	59.0	60.0	38.5	35.0	36
	Glucose	80	135	85	80	105	95	90	
	I/G	.54	.66	.89	.74	.57	.41	.39	
AS	Insulin	23.0	100+	100+	55.0	24.0	20.0	21.0	51
	Glucose	61	106	96	43	61	64	61	
	I/G	.38	.94+	1.04+	1.28	.39	.31	.34	
SL	Insulin	26.0	76.0	107.0	87.0	34.0	33.0		48
	Glucose	90	155	155	105	80	90		
	I/G	.29	.49	.69	.83	.43	.37		
LH	Insulin	18.0	51.0	97.0	28.0	25.0	17.0	20.0	61
	Glucose	115	205	205	140	90	85	95	
	I/G	.16	.25	.47	.20	.28	.20	.21	
JC	Insulin	20.0	146.0	47.0	88.0	20.0	25.0	25.0	31
	Glucose	75	155	115	85	55	75	88	
	I/G	.27	.94	.41	1.04	.36	.33	.28	

four hours following oral carbohydrate administration, followed by a rise in blood sugar, were separated from subjects who did not exhibit this behavior. Subjects with the hypoglycemic glucose tolerance curve were placed in Group 2; the others were labeled Group 3.

Results

All Group 3 subjects had been given a glucose tolerance test because diabetes was suspected. Both HKP and MP each had a diabetic parent and a diabetic sibling. They have a 50 per cent probability of developing diabetes. NM's parents are both diabetics. He has a 100 per cent probability of becoming diabetic. This group was considered to represent prediabetics.

Group 2 included all subjects exhibiting hypoglycemic symptoms. This group also included the remainder of the subjects being screened for diabetes.

A scatter diagram of the relationship between insulin and glucose levels was plotted, with each point representing concomitant insulin and glucose concentrations. It was observed that Group

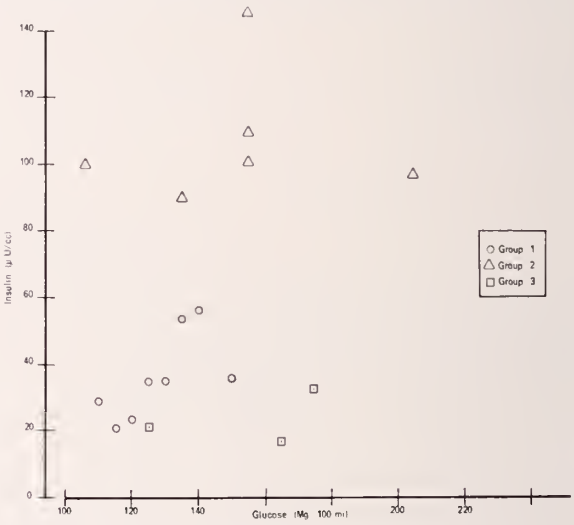

Figure 1:
Scatter Diagram Showing
Highest Insulin and Glucose Levels for Each Subject

Table 3.

Plasma Glucose and Insulin Responses to An Oral Carbohydrate Load—Group 3

Legend: Insulin = Microunits Insulin/cc
Glucose = mg. Glucose/100 ml.
I/G = Microunits Insulin/cc / mg. Glucose/100 ml.

Patient	Value	Fasting	½ hr	1 hr	2 hr	3 hr	4 hr	5 hr	Age
MP	Insulin	15.0	21.0	19.0	9.0	7.0	5.0	9.0	7
	Glucose	80	125	120	100	90	80	80	
	I/G	.19	.17	.16	.09	.08	.06	.11	
HKP	Insulin	7.0	17.5	16.0	11.0	10.0	7.0	11.5	61
	Glucose	85	155	165	95	85	60	60	
	I/G	.08	.11	.10	.12	.12	.12	.19	
NM	Insulin	2.0	17.0	16.0	33.0	13.0	4.0	1.0	22
	Glucose	80	165	175	140	125	85	85	
	I/G	.03	.10	.09	.24	.10	.05	.01	

Table 4.

Plasma Glucose and Insulin Responses to An Oral Carbohydrate Load—Mean Values

Legend: Insulin = Microunits Insulin/cc
Glucose = mg. Glucose/100 ml.
I/G = Microunits Insulin/cc / mg. Glucose/100 ml.
I/G s = Standard Deviation of I/G

Group	Mean Value	Fasting	½ hr	1 hr	2 hr	3 hr	4 hr	5 hr
Group 1	Insulin	12.1	30.2	30.6	23.6	23.8	12.6	10.3
	Glucose	88.1	128.1	117.5	99.4	89.4	79.4	85.0
	I/G	.137	.232	.253	.244	.258	.161	.122
	I/G s	±.059	±.075	±.079	±.095	±.122	±.079	±.052
Group 2	Insulin	24.5	91.7	89.5	65.5	30.3	24.5	22.5
	Glucose	85.1	151.8	131.0	93.8	77.7	82.3	82.8
	I/G	.306	.640	.683	.797	.380	.297	.272
	I/G s	±.128	±.245	±.224	±.333	±.105	±.089	±.082
Group 3	Insulin	8.0	18.5	17.0	17.7	10.0	5.3	7.2
	Glucose	81.7	148.3	153.3	111.7	100.0	75.0	75.0
	I/G	.100	.127	.117	.158	.100	.071	.103
	I/G s	±.068	±.032	±.032	±.063	±.016	±.046	±.073

2 exhibited a higher insulin per glucose response than the normoglycemic controls, Group 1. The prediabetics, Group 3, had a lower insulin per glucose response than Group 1. Because of the small number of subjects and the random pattern of the scatter diagram, it was felt that statistical analysis of the diagram would not be reliable.

A second scatter diagram (Figure 1) of insulin-glucose values was plotted, with each point representing the highest insulin and glucose levels for that subject. The two values for each individual were not necessarily from the same blood sample. This diagram revealed a patient population separation into three distinct groups. Group 2 fell totally above the normal (Group 1) range of insulin-glucose values, while Group 3 fell totally below the normal range. The relation of insulin concentration to blood glucose level was quantitatively examined. Insulin concentrations were divided into glucose values for each blood sample, deriving an "insulinogenic index" (I/G).[5] Individual subject insulin, glucose and I/G values appear in Tables 1, 2, and 3 according to previously defined grouping.

Mean values for insulin concentrations, glucose concentrations, and the "insulinogenic index" of these values appear for each group in Table 4. One standard deviation is shown for each "insulinogenic index".

Mean "insulinogenic index" curves and standard deviations are plotted against time in Figure 2A. Mean response for each group reveals different insulin secretory patterns for each group.

All three groups exhibited a rise in the index in response to glucose loading, with a return to fasting levels. Group 1 showed a fasting I/G index of .137. This group maintained an index level between .232 and .258 until the third hour. A fasting index level was apparent by the fifth hour.

Group 2 had a fasting index of .306. The index rose considerably until the second hour, when it reached a peak of .797. The index dropped considerably during the next two hours. Fasting values were reached by the fourth hour.

Group 3 exhibited a mean fasting index of .100. The index rose to .158 by the second hour, but all three index curves in this group were characteristically flat for the entire glucose tolerance test.

Insulin response totally unrelated to stimulus in one subject (JC) aroused suspicion of an adenoma. The exact cause of this bizarre insulin response must await further evaluation.

The three prediabetic subjects were screened for diabetes on the basis of their genetic history. The I/G relationship exhibited here correlated with the physicians' suspicions of abnormal carbohydrate metabolism, but elicits a response that is not apparent from the glucose tolerance test alone.

The insulin assay also demonstrated hypoglycemic behavior in several patients suspected of being hyperglycemic. On the basis of the glucose tolerance test alone, LH, for example, would appear to be a diabetic.

Discussion

An overlap of the standard deviations of the "insulinogenic index" in Figure 2A suggests that while the three mean group responses show distinct patterns, interpretation of individual index levels may not always place the individual in any specific category. These findings are suggestive of differential trends between the groups. A larger group will be studied to see if these findings are valid.

Figure 2B was prepared for clinical use of the insulin assay. Figure 2B is similar to Figure 2A, but hypoglycemic, normal, and prediabetic ranges include only areas within the respective

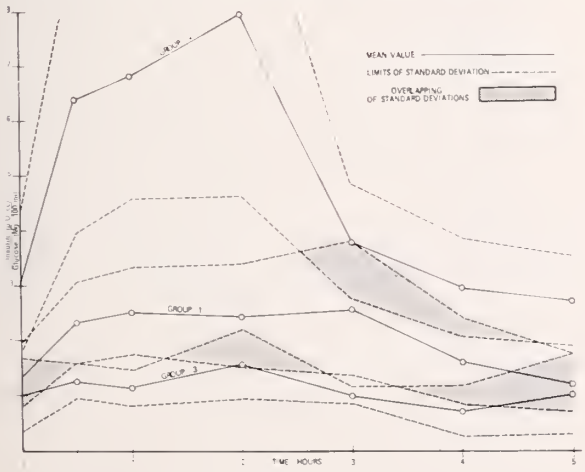

Figure 2A:
Insulinogenic Index Curves Plus Statistical Analysis

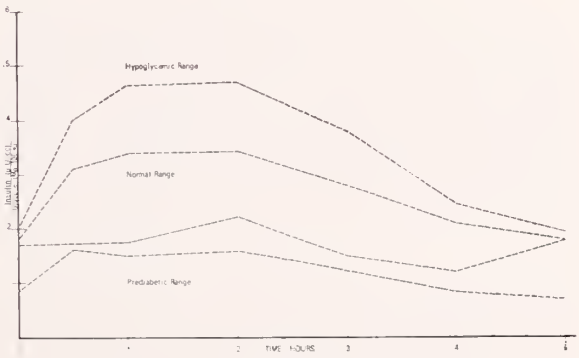

Figure 2B:
Insulinogenic Index Ranges

standard deviation exclusive of overlapping with adjacent areas. The areas between the three ranges are suggestive of intermediate values.

Two Types of Hypoglycemic Subjects

Two types of hypoglycemic subjects were encountered in this study. The first type, a post-hyperglycemic hypoglycemia, is usually found in healthy individuals eliciting such a response two to four hours following a high carbohydrate meal. Insulin and glucose concentrations rise rapidly, followed by a rapid fall. Crofford[6] reports that symptoms are relieved by oral glucose.

The second type of hypoglycemia is found in mild, maturity onset diabetes. Symptoms occur two or four hours following carbohydrate loading. The symptoms are usually relieved by a high protein diet or sulfonylurea treatment. "The rational of this approach is that if the drug can cause insulin to be released from the beta-cells more promptly, the serum insulin concentration will not reach such high levels and the subsequent hypoglycemia can be prevented."[7]

Our study supports the observations that reactive hypoglycemia and hyperinsulinism have been thought to be early signs of diabetes.[7]

Four of the six hypoglycemic subjects we encountered exhibited their lowest blood glucose values at the third or fourth hour of the glucose tolerance test. Had only a three-hour glucose tolerance test been done, these hypoglycemic conditions might not have been recognized. This would suggest that a five-hour test is necessary to pick up some hypoglycemic responses to glucose loading.

Glucose tolerance test curves suggestive of a diabetic condition were observed both in Group 2, the hypoglycemic group, and Group 3, the prediabetic subjects. Such evidence suggests that diabetes is not just an inability to produce insulin, but rather encompasses a wide range of abnormal insulin response to glucose loading.

Summary and Conclusions

The principles of the radioimmunoassay of plasma insulin are described. Insulin and glucose concentrations were measured in 17 patients. Patients were, on the basis of history and glucose tolerance response, classified hypoglycemic, normoglycemic, or prediabetic.

An "insulinogenic index", $\frac{\text{microunits insulin/cc,}}{\text{mg. glucose/100 ml.}}$ was determined for each concomitant insulin and glucose concentration. Hypoglycemic patients exhibited higher I/G index curves than normoglycemic subjects, while the prediabetic subjects had lower, characteristically flat, index curves. From mean values and one standard deviation of the "insulinogenic index" vs. time, clinically useful ranges for each group were determined.

Hypoglycemic indexes in some suspected diabetics suggest that functional hypoglycemia seems to be an early sign of latent diabetes.

A five-hour oral glucose tolerance test is indicated for diagnosis of some hypoglycemics, since hypoglycemic glucose tolerance values may not appear before the third or fourth hour.

The insulin assay has proven valuable in demonstrating a probable beta-cell tumor .

This study supports the findings of others that genetic prediabetics have a lower plasma insulin response to glucose loading than normoglycemic control subjects.

Acknowledgements

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References

1. Metropolitan Life Insurance Company: Ideal Weights for Women, Metropol. Life Ins. Statis. Bull. 23:6, 1942.
2. Tammes, A. R. & Nordschow, C. D.: An Approach to Specificity in Glucose Determinations, Am. J. Clin. Path. 49:613-620, 1968.
3. Hales, C. N. & Randle, P. J.: Immunoassay of Insulin With Insulin Antibody Precipitate, Biochem. J. 88:137-146, 1963.
4. Diabetes Mellitus: A Collection of Monographs, The Upjohn Company, 1969.
5. Perley, M. & Kipnis, D. M.: Plasma Insulin Responses to Glucose and Tolbutamide of Normal Weight and Obese Diabetic and Nondiabetic Subjects, Diabetes 15:867-874, 1966.
6. Crofford, O. B.: Use of Insulin Assays in Clinical Medicine, J. Tennessee M. Assoc. 60:935-938, 1967.
7. Faludi, G., Bendersky, G. & Gerber, P.: Functional Hypoglycemia in Early Latent Diabetes, Ann. New York Acad. Sci. 148:868-874, 1968.

Special Article

Charge Your Usual and Customary, or Reasonable, Fees

Worthy W. McKinney, M. D.

All physicians have been bombarded in the past few years with the phrase relating to "usual and customary, or reasonable, fees." Too often, however, they have not heeded or complied with advice to bill on this general basis, particularly in instances of third-party payments. It appears there are many reasons for charging less than usual and customary, or reasonable, fees —and these might have seemed justified at the times involved.

Now the error of our ways is catching up with the medical profession. All of the reduced billing charges have been fed into computers, and now those reduced, and recorded, fees are—from a practical standpoint—our usual and customary, or reasonable charges. Payments more often than not are further determined by a percentile based on those reduced fees.

Last summer, as Chairman of the West Virginia State Medical Association's Medical Economics Committee—and with the help of the staff in the Association's office in Charleston—I developed and distributed among members of the Association a questionnaire dealing with third-party medical practice. The response to the questionnaire was gratifying. Thirty-five per cent of the forms were completed and returned. When Executive Secretary William H. Lively of the Association and his assistant, Edward D. Hagan, began the statistical tabulation they noted that the comments and remarks were more informative than the figures, but also very difficult to measure. It is my opinion that physicians as a group reflected widely varying opinions on this general question of fees, an opinion I feel the questionnaire results clearly substantiated.

Statistical results of the questionnaire are shown on the accompanying table, with related observations clearly providing, in numerous instances, opportunities for physicians to voice frustrations as well as concerns. Suggestions to the Medical Economics Committee, the Medical Association and others with regard to possible solutions of current third-party problems literally covered the waterfront.

At one extreme, physicians suggested that "we stop being so money-minded, and make no charge to the indigent regardless of race, color or creed." One physician had the courage to suggest that "A few M. D.s are charging more than justified for their services." At the other extreme, several physicians said, "We should exclude all third-party interference and charge usual and customary fees to the individual patients." Many of the comments indicated that physicians feel their public image is tarnished; that they have lost much of their public esteem, and that a better press was needed.

Methods physicians could use to improve their public image and obtain a better press (in the face of a definite feeling the public media often seem deliberately to distort and misunderstand) were suggested. One physician proposed that we "publicize the good we do instead of becoming involved in controversial issues that can be misunderstood." Several felt that the public needs more information on all government programs, and some even thought that we should attempt to "inform the governmental agencies and officials about our long and irregular working hours, increasing business expenses and responsibilities in the practice of medicine." Several others suggested that we justify our fees by stressing our long, expensive and poorly paid years of preparation in becoming M. D.s, and comparing our charges on an hourly basis with plumbers, television repairmen and other service technicians. It was pointed out that M. D.s should not be criticized for large incomes any more than well paid executives in industry.

Several replies stressed a shortage of physicians, with a need for more to be graduated by the West Virginia University School of Medicine. Although one reply said that the doctor shortage was over emphasized, it added that "a return to

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care by the general physician would give better and less expensive care."

Some physicians observed that it would help if we publicized the cases of reduced and non-payment of fees; the fact that fees in West Virginia are not as high as those charged in California and New York; and that the percentage of increase in medical fees is not as high as in hospital charges and drug bills. In general, most of the replies indicated there were too many complicated forms, and too much paper work.

Several programs were singled out for specific comments, and many of the complaints regarding them were similar. Since this report was presented to the Council of the West Virginia State Medical Association in August, 1970, attempts have been launched to meet with representatives of the third-party agencies, and a number of these sessions already have been held. Others are being arranged and planned with the overall goal of establishing a base of greatly improved communications and exchange of observations and facts about the various program operations and needs. The following material will cover comments by our survey related to the specific third-party areas; actions taken by the Medical Economics Committee toward solution of at least some of the problems, and the current status of third-party operations.

Medicare

Comments about Medicare have indicated that there is confusion between the physician and the patient regarding the deductible items, and limitations of the program. Many physicians feel that direct billing to the patient without accepting assignments is preferable. But many also have become frustrated by the inability of elderly patients to understand and handle the billing forms. Long delays in payments aggravate both the patient and the physician. When fees are reduced, the reason is often obscure. Also, when the fees are disallowed or reduced, there is the implication that the patient has been overcharged. One M. D. replied that printed forms were sent to the patient to question a difference in charges by physicians for similar services. Several M. D.s reported that the allowable length of stay in the hospital for certain conditions and determination of necessity for hospitalization are being determined by non-medical personnel. Naturally, qualifications of those persons for this very important function are being questioned.

Your Committee feels that most of the comments are well founded. But progress in this important part of our medical practice is very slow and unrewarding. Recently, the U. S. Department of Health, Education and Welfare—without allowing public discussion—indicated its intent to lower the cutoff, or ceiling, on physicians' services under Medicare from an 83rd percentile basis to a 75th percental basis. In other words, the new guidelines limit fees that Medicare will pay to what 75 percent of all doctors charge for the same service in the same area. At the same time, HEW announced it would take 1969 rather than 1968 as the basis for determining customary physician charges. The effect is that one action offsets the other, leaving physicians' payments at much the same level at which they have been for the past two years. The physician cannot legally collect any additional amount from the patient if assignment is accepted. If assignment is not accepted, the patient may be charged any amount agreed upon, but the physician runs the risk that he might not collect it. *I would recommend that all patients be charged your*

Participation in Third-Party Medical Programs*

Frequency of Physician Participation

Programs	Frequently	Occasionally	Rarely	Only When Patient Has Been Private Patient	Never
1. Medicare	70% (326)	14% (67)	8	8	9% (58)
A. Medicaid	25% (126)	22% (102)	10	10	37% (171)
B. Crippled Children's Services	9% (43)	23% (105)	11	11	37% (174)
2. Blue Shield	70% (324)	15% (68)	30	3	6% (29)
3. Department of Welfare	55% (258)	27% (123)	34	17	6% (29)
4. U. M. W. A.	45% (212)	18% (82)	50	13	25% (113)
5. Workmen's Compensation	36% (168)	32% (148)	72	15	12% (58)
6. Vocational Rehabilitation	26% (121)	42% (194)	74	8	14% (65)
7. Champus	7% (36)	30% (137)	144	16	27% (124)
8. Veterans Administration	6% (29)	28% (131)	140	20	30% (140)
9. M. F. H. P.	3% (13)	3% (13)	34	8	83% (380)
10. Civic Organizations	3% (12)	8% (39)	100	20	59% (269)

*As measured by a questionnaire sent to all members of the West Virginia State Medical Association by the Association's Committee on Medical Economics. Of the 1,320 questionnaires mailed, 461, or 35 per cent, were completed and returned.

usual and customary, or reasonable, fees, and that assignment not be accepted as a general rule. There might be certain selected cases in which acceptance of assignment and waiver of the deductible portion of the bill might be indicated, but again, usual and customary, or reasonable, charges should be made and your records should clearly show the actions taken. Generally speaking, patients should be responsible for completing forms and collecting Medicare payments. It might, however, sometimes be necessary for physicians' aides to help patients with Medicare forms in order that those persons might receive the benefits to which they are entitled under law.

Blue Shield, Other Medical Insurance

With particular respect to Blue Shield, many replies to the questionnaire indicated feelings that fee limitations are too low by current standards, and not understood by the patient. There are six Blue Cross-Blue Shield Plans in West Virginia, with considerable differences among them and a history indicating varying degrees of progressiveness. There also is misunderstanding about various operational features of Blue Shield, a situation which spokesmen for at least some of the plans concede is at least partially their fault. Some doctors felt there was a lack of physician representation on Blue Shield policy-making boards, but state law requires that a majority of such board members must be physicians. Other physicians felt payments were slow as well as inadequate under Blue Shield, and they blamed delays on minor technicalities. A lack of first and full names, in the program used by the computer, makes crediting of payments difficult.

Four particular Blue Shield problem areas warranted special comment as a result of the survey, although, again, certain differences in coverage among the six plans in West Virginia must be taken into consideration in proper evaluation of them. The areas were (1) non-payment of surgical assistants; (2) a refusal by at least some of the plans to pay hospitals for diagnostic tests, although patients frequently insist on hospitalization; (3) refusal of payment if a presumptive diagnosis is inaccurate, and (4) use of forms asking for the cost of laboratory charges to physicians, and the charge for collecting specimens.

A further review of Blue Shield plans, and additional conferences with officials of such plans, will be undertaken by the Medical Economics Committee. Meanwhile, significant improvements already have been made in the Charleston Plan. As a result of more than two years of study, in which physician representatives had key roles, about 37 per cent of payments now made to physicians under group and other coverage are at the usual and customary, or reasonable, fee levels. A diagnostic rider also has been improved to cover tests in either out-patient hospital or physician's office situations. An out-patient rider has been a part of the Charleston Plan coverage for 15 years. The Charleston Plan also has expressed a desire to improve any communications problem which might be a factor in slow payments.

Physicians felt that all medical insurance plans have limitations as to the indemnity paid under policies. Such limitations are not made clear to the buyer, and interpretations by the insurers might be arbitrary and unfair to patients. Physicians have little to say in such instances, although complaints filed with the State Insurance Commissioner might help. Once again, usual and customary, or reasonable, charges always should be made in such cases.

Department of Welfare

Many replies to the questionnaire indicated that payments by the Department of Welfare were slow, slow, slow and irregular. Payments as received also frequently were reduced, or the invoices were rejected without proper explanation. Payments varied for the same procedure. Specifically, these items drew comments: (1) the 30-day limitation on submitting bills; (2) payment of bills identified by number instead of by name; (3) no payments for laboratory charges for procedures done in the office; and (4) excessive paper work centered about complicated and cumbersome forms.

Members of the Medical Economics Committee and the Joint Conference Committee have had several meetings with Welfare Commissioner Edwin Flowers and members of his staff, and some of the problems have been corrected. It is hoped that an improved staff situation in the Department and more effective use of the computer will cut down payment delays. An attempt by the Department to simplify forms, and to provide for identity of patients by name rather than by number, is being made. Once more, physicians should base all charges to the Department of Welfare on their usual and customary, or reasonable, fees.

The welfare agency operates three medical care programs under which it makes vendor payments to physicians; the *Title XIX, or Medicaid, Program; Crippled Children's Services;* and the *Services to the Visually Handicapped and Blind Program.*

Medicaid covers physicians' services rendered both in and outside hospitals. Those eligible for

the program include all persons on public assistance in West Virginia; children in foster care under Department of Welfare Supervision, and another group of youths 18 to 21 years of age who would be eligible for inclusion in public assistance grants except that they are not in school. Fees paid under the program basically are determined by funds available in state appropriations, and federal matching money, but payments to physicians now generally average 75 to 80 per cent of usual and customary charges. Payments under the program also are tied to percentile limitations within Medicare. *All physicians providing services under Medicaid, however, should follow the general practice of billing the Department of Welfare at usual and customary levels.*

Crippled Children's Services payment to physicians are made under the same schedules used for Medicaid with some limited exceptions. There are some instances in which members of clinic staffs under this program are paid set fees of varying amounts; and some instances, in small clinics, where per-case payments are made for specialized treatment provided. Medical eligibility embraces handicapping conditions present at birth, such as cerebral palsy, club foot, spina bifida, clefts of lip or palate, heart defects and a number of others. Among acquired conditions acceptable for treatment are poliomyelitis, tuberculosis of bone and joint, urological conditions, eye conditions requiring surgery, burns requiring skin grafting, birth marks, results of accidents, cystic fibrosis, convulsive disorders and speech and hearing disorders. Services are offered to the mentally retarded who also have medical conditions eligible for treatment. Financial eligibility is based on numerous factors, including the extent and cost of treatment and family income. Eligibility thus is NOT limited to recipients of public assistance grants. Children are examined in plastic, cardiac and numerous other clinics operated in various parts of the state, or in physicians' offices, with pediatric evaluations among services provided.

The Visually Handicapped and Blind Services Program is designed to provide eye care, such as examinations, eyeglasses, surgery, artificial eyes and other courses of treatment which will prevent blindness and restore vision. Unlike the Medicaid and Crippled Children's programs, for which both federal and state money is available, this program is financed entirely with state funds appropriated by the Legislature. On some occasions, a shortage of funds makes at least temporary curtailments necessary in some of the services provided. Again, payment is made according to established schedules which currently are the same as those of Medicaid.

In summary, the rapport with the Department of Welfare is good at the present time, with provisions for a continuing exchange of information about program changes, plans and the like. Physicians are urged to call any specific questions or problems they might have to the immediate attention of Dr. Jimmie L. Mangus, Medical Director, or Mrs. Helen Condry, Assistant Director of the Division of Medical Care Standards, West Virginia Department of Welfare, State Capitol, Charleston 25305.

United Mine Workers of America

In view of the volume of work involving a majority of the physicians in West Virginia, there were few complaints about this medical program, and general approval of fees and billing methods. There was an occasional complaint about delays in settling an account. Some physicians felt that retainers were inadequate, but others pointed out that fees for services could usually be worked out if desired.

Several replies pointed to what physicians regard as attempts by the United Mine Workers to coerce pensioners to use certain physicians on retainers. This gave rise to further questions as to why some physicians apparently are not eligible to provide, or are not providing, care under this program. Is this situation due to some certifying authority of the UMWA, or does it reflect physicians' personal desires or discretions?

While the Medical Economics Committee has had no recent direct contact with the UMWA, it has kept abreast of communications between the Department of Welfare and the UMWA Program in the general area of services for crippled children. Those discussions have established, in general terms, that the UMWA has machinery to provide services for eligible children from its resources if the welfare agency's funds are exhausted prior to the end of a fiscal year.

Specific problems or questions relative to the UMWA Program should be directed to the following Area Medical Administrators at the addresses listed: Dr. Samuel C. Gallup, Post Office Box 2106, Charleston 25328 for District 17; Dr. Donald R. Chadwick, Post Office Box 1229, Beckley 25801 for District 29; Dr. Robert L. Smith, 900 Chestnut Ridge Road, Morgantown 26505; or Dr. Warfield Garson, Sixth Floor, Empire Building, Pittsburgh, Pennsylvania 15222.

Workmen's Compensation

Considering the large number of cases and the high percentage of M.D.s who treat Workmen's

Compensation cases, the complaints and problems were minor. Many physicians commented on recent improvements in the program and most felt that the fees paid were adequate, although fees in the complicated or prolonged cases need further revision. There still is difficulty in obtaining claim numbers, and there are frequently delays of three months or longer between treatment and payment.

The manner in which the computer is programmed likewise has caused trouble with names and initials, and in crediting payments to the proper accounts. There is too much repetition in billing forms, and possible modification of the billing and reporting forms must be given consideration, particularly with respect to long-term disability cases.

Several meetings with Commissioner Frederick L. Davis, Jr., and his staff—the last of which was arranged late in October, 1970, by Dr. Lawrence S. Miller of Morgantown as Chairman of our Workmen's Compensation Committee—have aided in resolving many of the complaints and in creating good working relationships. Dr. Kenneth G. MacDonald, Medical Consultant to the Workmen's Compensation Fund, State Capitol, Charleston 25305, should be contacted with respect to any further questions or problems physicians handling compensation cases might have.

Vocational Rehabilitation

Comments on the merits of this program varied widely, with strong support for the good work accomplished—and strong complaints about some of the Division's operational methods. Many replies said fees were low and unrealistic. A $10 fee is inadequate for the scope of the general examination it calls for, and in many instances the necessity for examinations was questioned.

In numerous other cases, detailed information from patients' records is requested without offer of payment for physicians' expenses involved. The Division still is using out-of-state physicians for services that could be obtained in the state, and some of the replies said patients are being directed to certain favored and perhaps more cooperative physicians.

We feel that progress is being made in solving problems identified in the DVR Program. Two meetings with Director Thorold S. Funk of the Division—the last arranged on December 17, 1970, by Dr. Buford McNeer of Hinton, Chairman of our Vocational Rehabilitation Committee—have had mutually beneficial results. With Mr. Funk's cooperation, a review of the Vocational Rehabilitation fee schedule currently is being made by representative members of the medical specialities, with particular attention being directed to ranges of fees which would be reasonable, and clarifications with regard to terminology and procedures that would be desirable.

Mr. Funk has discussed with us plans, and steps already under way, to eliminate overlapping of medical services through better screening of patients and tightened cooperative procedures with other agencies, including the Department of Welfare. We also hope to be able to help the Division of Vocational Rehabilitation obtain the services of physicians for two staff positions, including one with basic responsibilities as a consultant on medical problems in his role as a medical director.

CHAMPUS

There were no favorable comments about this program for dependents of military personnel. Physicians' replies ranged from the common complaint that billing forms are too long and complicated, with redundant communications and delay in payments, to the statement that "CHAMPUS was impossible to deal with."

The following was extracted from Directives of 4 November 1970:

"Physicians and other sources of care who accept patients as beneficiaries under the CHAMPUS and submit claim forms for payment agree in writing that *allowable payments* under the program will be accepted as payment in full for the services and supplies listed on CHAMPUS claim forms."

Department of Defense Pamphlet 3-b lists "the various amounts which beneficiaries are required to pay as their legal share of costs for medical services obtained outside of uniformed services facilities."

It was observed that payments under CHAMPUS have not been based on usual and customary, or reasonable, fees in West Virginia—and a question was asked as to why that has been the case in the light of apparent usual-and-customary fee bases in other states.

Veterans Administration

Most West Virginia physicians feel that the Veterans Administration Program outpatient care is inadequate. The hospital care is prolonged and tends to produce invalids instead of cures. The VA coverage of non-service connected illness by individuals with adequate financial means is unwarranted, and care for those over 65 is an unnecessary duplication of medical services. Few private physicians see these patients, and most feel fees are inadequate.

Mountaineer Family Health Plan

This program was initiated under the Office of Economic Opportunity, but since 14 December 1970 has been under the 314 E Program, Health Services and Mental Health Administration, in HEW. Only Raleigh County is covered. The program cooperates with the nine-county Southern West Virginia Regional Health Council, particularly in the dental program. Eligibility for coverage is determined by (1) residence in Raleigh County and (2) a sliding scale income limitation with a base of $1,800 for one person living alone. There is no relation to the Appalachian Regional Hospital except that the program rents space from the ARH in Beckley. This program has hired physicians who treat patients at the clinic and in the Beckley Appalachian Regional Hospital. Referrals are made for specialist care and usual and customary, or reasonable, fees are paid.

The program has been criticized particularly for assuming treatment of physicians in general practice and referring persons to specialists for similar care.

General Comment

All the medical insurance plans, private or government, are patient benefit plans. This means that they are plans to help the patient pay for his medical care, whether it be physican or hospital care.

The plans are not designed to assure that the physician or the hospital is paid for services. In many cases, patients have multiple coverage that actually pays amounts more than the medical costs. The fees the physician charges are not higher, although the patient may receive more than his cost. Premiums have been paid for this coverage, and the patient is entitled to his benefits.

By the same token, a physician's charge should not be lower because the patient has no hospital benefits, or the expected payment is less than usual. Usual and customary, or reasonable, fees should be charged in all cases. Then, if there are extenuating circumstances, an adjustment can be made—but the usual and customary, or reasonable, charge for physicians' services have been recorded.

This principle is especially important in all cases involving third-party payment.

To Physicians in Training

To all physicians in training and especially West Virginia residents. West Virginia is in need of physicians in all categories for rural and urban practice. Any physician desiring information concerning openings in the State can communicate with *The Journal. The Journal* will publish free for 6 issues pertinent information concerning any qualified physician who is seeking a location in West Virginia. Single copies of *The Journal* listing practice opportunities will be mailed to physicians upon request.

A roster containing a list of officers of county societies and specialty sections of the West Virginia State Medical Association is available upon request to the headquarters offices. Also, information pertaining to West Virginia licensing laws will be mailed to interested physicians. Interested parties may then write the officers of component societies or sections for further information.

Any other information about West Virginia will be secured from outside sources, if possible, and sent upon request. All letters to *The Journal will* receive individual immediate attention.

Electrocardiogram of the Month

Ventricular Electrical Alternans

Donald K. Chung, M. D., and Edward K. Chung, M. D.

ELECTRICAL alternans denotes alternation in configuration of P waves, QRS complexes or T waves, or any combination of these occurring with regular rhythmicity and with constant intervals between the complexes.[1,2] The complexes should originate from one pacemaker and should not have any relationship to respiration or any other periodic extracardiac phenomena. The presence of electrical alternans is considered almost always to be indicative of organic heart disease.

The Authors

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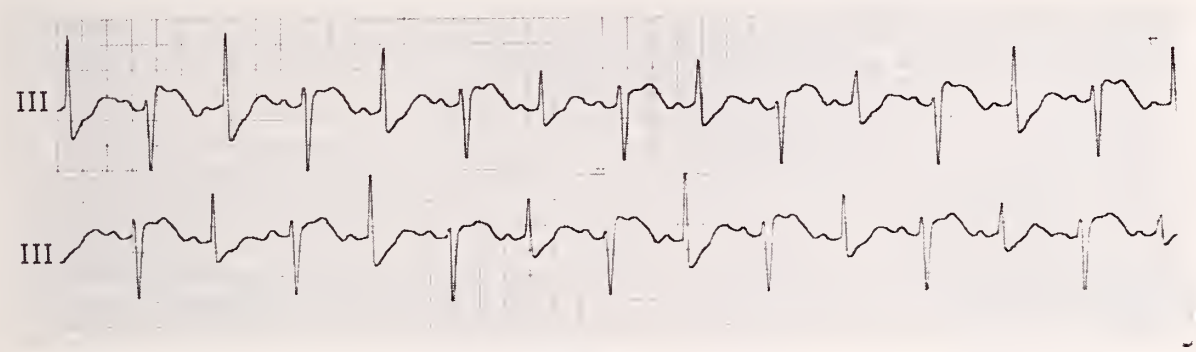

Figure 1

The most common form of electrical alternans involves QRS complex alone which is termed "Ventricular electrical alternans." This paper presents a case of 2:1 ventricular electrical alternans.

Case Report and Comment

An 84-year-old woman was admitted to the hospital because of chest pain. A diagnosis of acute myocardial infarction was made by typical electrocardiographic findings and elevation of serum enzymes. The patient developed congestive heart failure followed by cardiac arrest. There was no evidence of pericardial effusion.

Leads III-a and b in Figure 1 are continuous strips and taken a few hours before she expired.

The P-P and R-R intervals are equal throughout with constant P-R intervals indicating regular sinus rhythm at a rate of 95 per minute. Although each beat is originating from the same pacemaker (sinus), all other QRS complexes alternate their configurations. There are no rhythmic alternations of P or T waves. Therefore the electrocardiographic finding is diagnostic of 2:1 ventricular electrical alternans.

Ventricular alternans is the most common form of electrical alternans and 2:1 electrical alternans as seen in the present case is the most common alternating ratio. Electrical alternans may persist, but more commonly its occurrence is transient or intermittent. The underlying rhythm is commonly sinus, but occasionally it may be any ectopic rhythm such as atrial fibrillation or A-V nodal tachycardia.

The exact mechanism of electrical alternans is not yet clearly understood. However, various hypotheses have been presented, such as anatomic alternation of the cardiac position,[3] alternation of cardiac output,[1] and alternating prolongation of the refractory phase of some part of the heart.[2,4] All of the 12 patients with ventri-

cular electrical alternans studied[2] by one of us and the present case had underlying cardiac disease (other than pericardial disease), in which abnormal refractoriness of heart muscle might reasonably be expected to be present. Therefore, we are inclined to favor the hypothesis of alternating refractoriness of ventricular muscle for the mechanism of ventricular electrical alternans.

Electrical alternans which occurs in rapid sinus tachycardia is usually insignificant clinically. When it occurs at a relatively slow rate it is usually pathological. Electrical alternans per se requires no treatment but the underlying cause must be treated. The prognosis for patients with electrical alternans is often poor because of advanced heart disease and congestive heart failure as underlying causes.

References

1. Spodick, D. H.: Electrical Alternans of the Heart, Its Relation to the Kinetics and Physiology of the Heart During Cardiac Tamponade. Am. J. Cardiol. 10:155, 1962.
2. Chung, E. K.: Walsh, T. J. and Massie, E.: Electrical Alternans: A Report of 12 Cases. Am. J. Med. Sci. 248:212, 1964.
3. Colvin, J.: Electrical Alternans: Case Report and Comments on the Literature. Am. Heart J. 55:513, 1958.
4. Schamroth, L., Segal, F. and Rabinowitz, D.: Electrical Alternans with Unusual Features. Am. Heart J. 58:900, 1959.

Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (not onion skin or flimsy), standard letter sized (8½ by 11 in.) white paper. Wide margins (at least 1¼ in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Authors are requested to submit a carbon copy with the original or retain same in the event the manuscript is lost in transmittal.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for cuts should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it. The author will bear the cost of all over two one-column halftone cuts.

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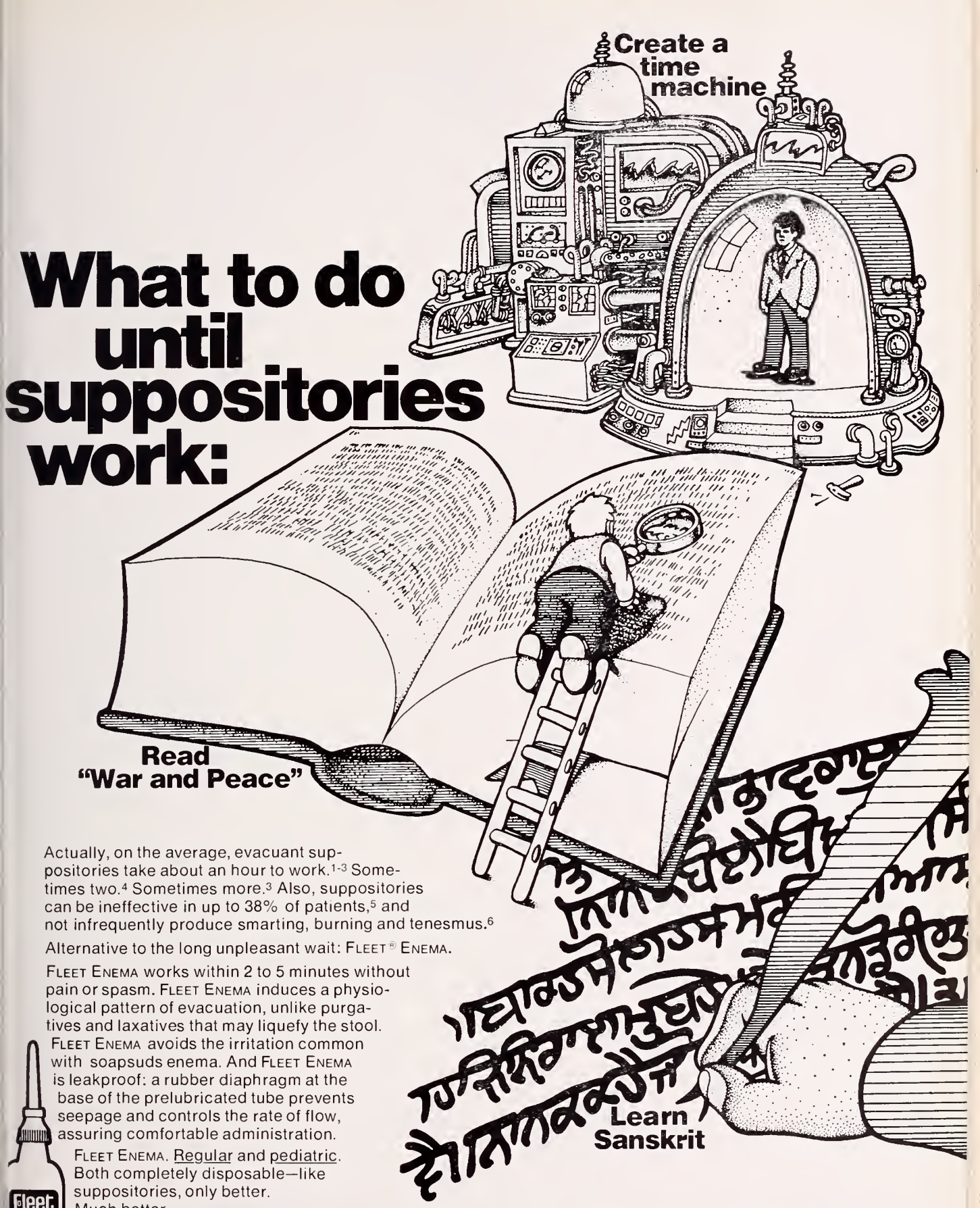

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References: 1. Blumberg, N.: Med Times 91:45, Jan., 1963. 2. Sweeney, W. J., III: Amer J Obstet Gynec 85:908, Apr. 1, 1963. 3. Weinsaft, P.: J Amer Geriat Soc 12:295, Mar., 1964. 4. Baydoun, A. B.: Amer J Obstet Gynec 85:905, Apr. 1, 1963. 5. Feder, I. A., Flores, A. and Weiss, J.: Amer J Gastroent 33:366, Mar., 1960. 6. Smith, J. J. and Schwartz, E. D.: Western J Surg 72:177, May-June, 1964.

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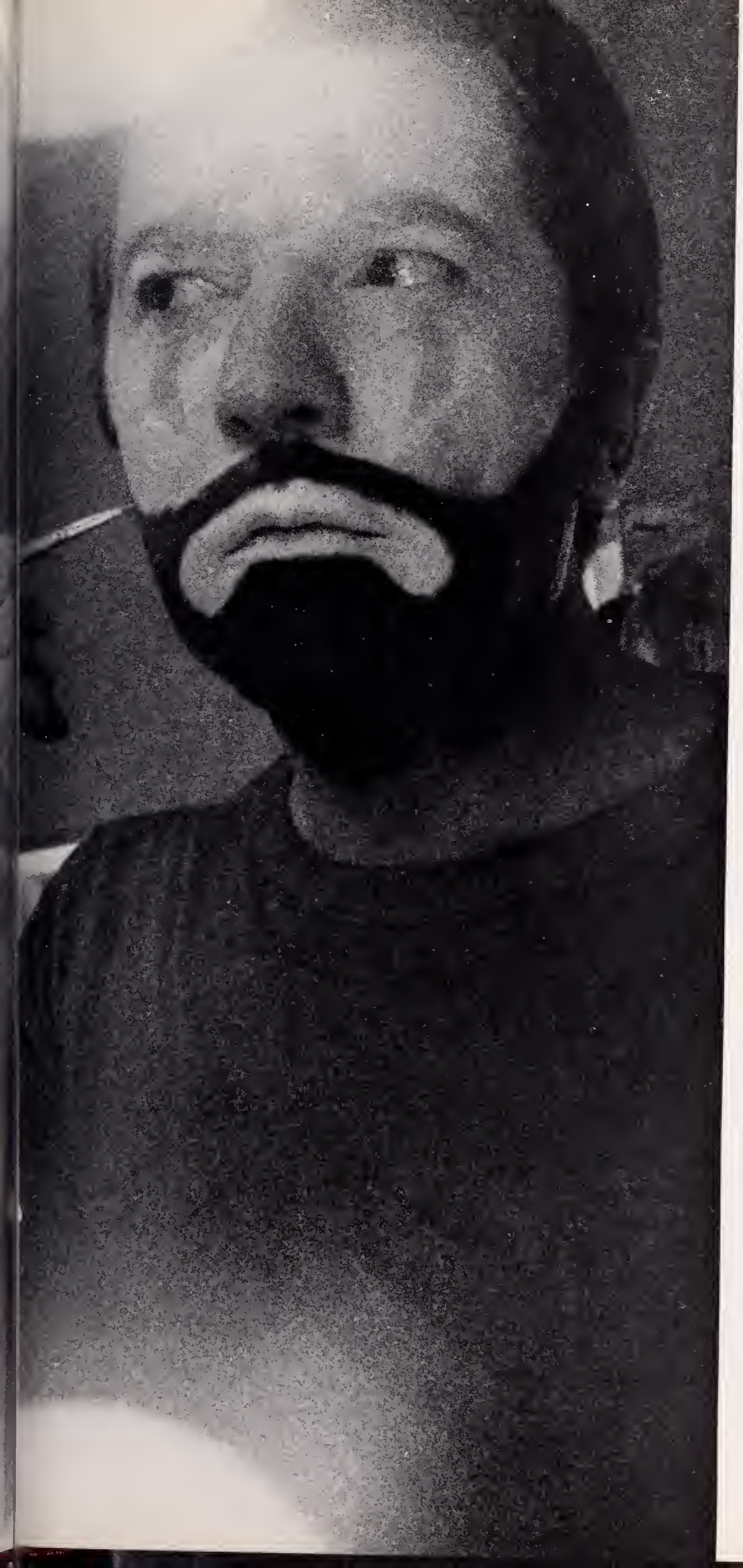

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084

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X-Ray Case of the Month

James K. Sexton, M. D., Radiology; R. Thomas Linger, M. D., Surgery; John M. Hartman, M. D., Internal Medicine: Andrew W. Goodwin, M. D., Radiology, and Everett W. Squire, M. D., Radiology, all of Charleston

This 42-year-old female presented with a three-year history of hypertension, increasing in severity over the past year. At the time of admission, the positive findings were limited to a blood pressure of 250/120, and mild hypertensive eye ground changes. There was no known family history of hypertension. The patient denied any history of renal disease. The blood and the urine studies were normal. VMA was 7.2 milligrams per cent. The BUN was 17.0. Serum potassium was 3.8. Minute sequence IV pyelograms were done showing a delayed nephrogram on the left with no significant difference in the renal size. There was no delayed washout nor renal calcifications, as shown in the films taken at one, two, three and four minutes. (Figures 1, 2, 3 and 4).

*From the Departments of Radiology and Surgery, Memorial Hospital, Charleston, West Virginia.

Figure 1
One minute film of minute sequence IVP

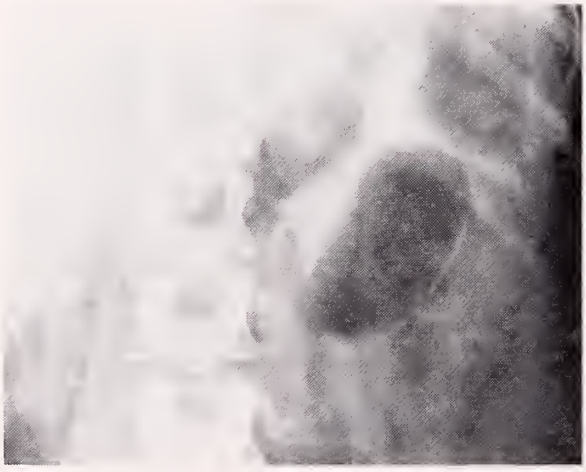

Figure 2
Two minute film with pyelocaleeal filling on the right and none on the left.

Figure 3
Three minute film. The left kidney collecting system has begun to fail.

Figure 4
Four minute film. A midstream injection, abdominal aortagram shows severe stenosis of the left renal artery with post stenotic dilatation. There is some minimal placquing noted about the origin of the right renal artery.

A renal arteriogram and selective bilateral renal vein rennins were obtained. The mid stream injection of the renal arteriogram demonstrated a marked stenosis of the left renal artery approximately 1½ cm. distal to the origin with marked post stenotic dilitation. There were minimal atheromatous changes about the origin of the right renal artery.

Bilateral renal endarterectomies with an endarterectomy of the adjacent aorta were performed with removal of multiple slightly calcified atheromatous placques from the left renal artery and several moderately large atheromatous placques from the right. Selective left renal vein rennin was reported as 395 nannograms per hundred milliliters versus 200 nannograms per hundred milliliters on the right.

Comment

Winter has estimated that three per cent of the general population is hypertensive. Renovascular hypertension is estimated to compromise three per cent to six per cent of all hypertensives, though instance has been reported as 20 per cent to 37 per cent in selective series. Hunt and Kincaid noted moderate to severe renal artery stenosis in 49 per cent of 256 unselected autopsies. This rose to 64 per cent when limited to patients over 50.

Clinical indications for renal arteriograms are:

A. The young hypertensive
B. A patient with acute onset of hypertension
C. Rapid progressive acceleration of hypertension
D. Hypertension and abdominal bruits
E. Positive minute sequence IVP

Renal lesions associated with hypertension evaluated by renal arteriography are:

A. Intrinsic renal vascular lesions
   1. Atherosclerosis
   2. Fibro-Muscular dysplasia
      a. Adventitial
      b. Muscular
      c. Intimal
   3. Renal artery aneurysm
   4. Embolism
   5. Renal A-V fistula
   6. Arteritides
      a. Takayashu's Disease
      b. Syphilitic arteritis
      c. Thromboangitis
      d. Periarteritis nodosa
   7. Renal vein thrombosis
B. Extrinsic Lesions
   1. Aneurysm of the aorta (also dissecting aneurysm)
   2. Fibrous or musculo-tendinous bands
   3. Trauma
   4. Renal tumor (also multi-cystic and polycystic)
   5. Co-arctation of the aorta
   6. Perinephric lesions (hemorrhage, abscess)
   7. Inflammation—pyelonephritis, glomerulonephritis, T.B.C.

Throw Steaks Out of Old Ball Game

That traditional thick piece of steak many athletes consider so important before the big game may be going out of vogue. The reason, say medical authorities, is that at best the steak is merely psychological. At worst it is unnecessary and too much. According to Bruce Melin, associate professor of physical education at Washington University in St. Louis, a survey of athletic trainers at a number of colleges and universities indicates that the traditional large before-game meal has been shrinking.

The trend today is toward smaller pre-game meals consisting predominantly of carbohydrates and, in some cases, of liquid meals that have a low fat and protein content. Also, the common practice of not allowing the athlete to drink water during practice or games has, in most cases, been abandoned. Most important, authorities agree today, is that athletes eat their meals regularly and that they stick to a balanced diet.—*Health Insurance Institute.*

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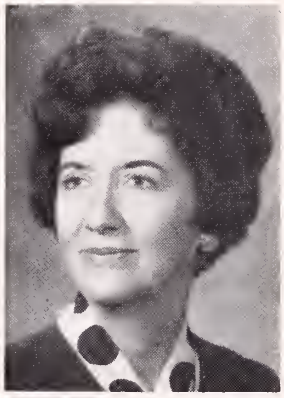

The President's Page

TIME DRIVETH ONWARD FAST

Guest Author, Mrs. Robert J. Tchou, President, Woman's Auxiliary to the West Virginia State Medical Association

TENNYSON said: "Time Driveth Onward Fast." How thrilling it is to realize that the most important event of this era has occurred in our lifetime, opening doors for mankind that shall never be closed again. We are told by astronomers that the universe is a thousand times bigger than they thought it was, and that some of the stars their telescopes reveal are five billion TRILLION miles away.

Such figures are staggering; however, to see life steadily, and see it whole, we should be impressed—TREMENDOUSLY impressed—by the scope of the Master Intelligence that created all this—and us, and try to fathom a reason why we are here. Mankind has been given a precious opportunity to improve—to progress—to become. This is a pretty inspiring concept!

As the new calendar year is well under way, our Auxiliary year is half finished, work plans are being executed and evaluation is in order. With arrival of county reports, we find most component Auxiliaries to have a balanced program of business, community service and social functions. Knowledgeable leadership and positive stands on medical issues have been emphasized. Reports indicate that we shall surpass our previous records in many phases of Auxiliary work. Working together is success!

Health manpower and membership recruitment are the major Auxiliary goals for the '70s, with AMA-ERF remaining the priority project. There are presently 1,437 members of the West Virginia State Medical Association. This offers a definite challenge to Auxiliary membership recruitment. From AMA-ERF's meager beginnings 20 years ago to the foundation's giant size factor in American Medical Education, we are fully aware of an even greater growth for the needs of its services and funds. Special effort has been made to inspire young people to take up the challenge of medicine.

Our Spring Board Meeting will be held in Clarksburg April 21-22. We are hopeful that all state and county officers will make every effort to attend. Convention Chairmen are working enthusiastically toward making the 47th Annual Meeting at The Greenbrier in August an outstanding convention.

I take this opportunity to thank Dr. George R. Callender, Jr., and our Medical Advisory Board for their cooperation and guidance, and Mr. William H. Lively and Staff for their splendid assistance throughout the years.

Auxiliary membership grants many wonderful privileges, but it carries with it a definite responsibility to the Medical Profession. We were privileged to give recognition to our physician husbands on Doctors' Day, March 30. May the noble purposes which inspire you and the ideals which you cherish ever endure, and may the best of good fortune be yours.

Rachel D. Tchou

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EDITORIALS

A PROBLEM WITH NUMBERS

In a recent editorial we started to take issue with those who label the American system of medical care a "non-system." We pointed out that the individual productivity of the American physician is unexcelled but noted that we do have a problem with numbers in relation to the demand for services. Let's look at some of the things being done about this problem by the medical profession.

Between the years 1960 and 1970, the number of medical school students rose 19.7 per cent—from 30,683 to 36,751. In this same period of time the number of medical school graduates rose from 7,081 to 8,213—a 15.9 per cent rise. In our own state of West Virginia, the first year we graduated a fourth-year class was in 1962. In that year there were 15 graduates. In 1970, 59 students graduated, a 393 per cent rise.

Does this sound like an unresponsive system—a non-system? Name another profession, aside from the military, which in the same or any comparable time period has demonstrated such phenomenal growth in response to demand. Name any other profession which has shown the flexibility, the willingness, or the capability to effect anything resembling the fundamental and extensive changes in curriculum and training which have occurred in American medical education. Name any other profession so dedicated to continuing education or which, year in and year out, is faced with the necessity of modifying techniques, procedures and concepts in response to new ideas, information and products of research.

Help in the numbers deficiency is being enlisted through the use of new ideas, techniques, procedures and new products of research. Help is forthcoming via computerized health surveys and other uses of computerized and automated equipment. Help is coming through the employment of physicians' assistants and other paramedical aides. All of these innovations have been initiated by physicians. And, last but not least, American physicians have responded to the demands by their sweat, by their toil, by putting in exhausting hours at a time when American labor is starting to trumpet for a 32-hour work week.

This is no non-system. This is a highly responsive, vigorous system working, reflecting on itself, advancing toward its goals of caring for the sick and, in the midst of it all, changing to meet the changing needs of those who come for help. The problem of relative lack of numbers is being met. It perhaps should have been foreseen—but God knows by whom. The demand for medical services, for whatever reason, has grown beyond any humanly predictable bounds. We will have further comments on this subject.

NEW NEVADA DEAN NATIVE OF W. VA.

The Journal has received a copy of the January 1971 issue of "Health News," published by the School of Medical Sciences, University of Nevada. The following is a short biographical sketch of George T. Smith, M. D., Dean of the School of Medicine:

"B. S., 1954 (cum laude), M. D., 1956, both University of Maryland; internship at the Royal Victoria Hospital, Montreal; hospitalship in pathology at the Vienna Academy of Medicine; residency in pathology at Peter Bent Brigham Hospital in Boston.

"At time of appointment: Acting Dean, School of Medical Sciences, and research professor of pathology, University of Nevada, Reno; board member, Western Interstate Commission for Higher Education, Intermountain Regional Medical Program, Davis Regional Medical Program and Pacific Southwest Regional Medical Library Service.

"Formerly: Research fellow and teaching fellow in pathology, Harvard University; director of the Cardio-Pulmonary Pathology Laboratory, Peter Bent Brigham Hospital; associate pathologist at Harvard and Peter Bent Brigham; director of the Environmental Patho-Physiology Laboratory, Desert Research Institute; assistant director, Nevada Regional Medical Program; winner of the Career Development Award in Cardiovascular Pathology of the National Institutes of Health in 1964; U. S. Army medical officer and North Atlantic Treaty Organization consultant in preventive medicine and pathology."

Doctor Smith was born in Terra Alta, West Virginia, in 1931, a son of Mrs. Charles E. Smith and the late Doctor Smith, who was formerly Superintendent of Hopemont Sanitarium and had been in family practice in Terra Alta for 35 years.

The two-year School of Medical Sciences, at Reno, admitted its first class of 24 students this year. There were more than 1,000 applications for the 24 places. Thirty-six students will be admitted next year and 48 each year thereafter.

The Chairman of the Admissions Committee said that of the 120 Nevada applicants, the Committe felt 44 were qualified to enter the new school. He said the lone out-of-stater is a girl from Idaho who was accepted because the Committee felt that "one position in the class should be given to a person from a state that has no medical school and with which Nevada is cooperating through regional medical programs, Western Interstate Commission for Higher Education and other efforts."

Best wishes and congratulations to Dean Smith from his many friends in West Virginia.

IT CAN HAPPEN HERE!

The reader's attention is called to the American College of Radiology Bulletin reprinted in the news section of this issue of *The Journal* concerning the enslavement of physicians in the Province of Quebec. This province is not in the undeveloped, backward areas of the world but lies adjacent to our Northeastern United States border. It is an educated land with great cities—many colleges and universities and renowned medical schools and medical teachers. It has been the site of a World-Wide Exposition. This province has great wealth and all the cultural advantages of an advanced civilization.

Yet, physicians are threatened and fined, imprisoned and refused permission to migrate all because they protest medical bondage—bondage to a department of government that has set restrictive conditions for medical practice and fee schedules far below usual and prevailing rates—bondage to a government department operated by a single despot with authority to completely govern the medical, professional and personal lives of physicians, send them to prison and deny them freedom of expression and action.

In the United States we are drifting towards similar enslavement despite the blandishments and promises of federal bureaucracy. The dictates of Health, Education and Welfare, Medicare and Nationwide are slowly binding us to a rigid schedule from which there is no escaping. Various plans for total medical care for all people are in the legislative hopper and whatever plan emerges, you can be sure it will have a chain-lock on the medical profession. We are not aware of any freeze in wages of federal bureaucracy or Nationwide, but these two agencies interdict any manner of fee increase even to meet the ordinary cost of living processes in professional income.

This may be the last chance for the free practice of medicine to endure. Let us tell our medical organization—state and national—we desperately need hope and help if we are to avoid the tragedy of medicine in Quebec.

VD Commission Formed

The U. S. Department of Health, Education and Welfare has formed a National Commission on Venereal Disease to alert the public to dangers of gonorrhea and syphilis now afflicting more than two million Americans. Dr. Bruce Webster of New York City, President of the American Social Health Association, will serve as the Commission's Chairman.

GENERAL NEWS

Emergency Room Director To Speak At 104th Annual Meeting

"Emergency Department: New Field of Practice" is the title of a paper which will be presented during the 104th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 19-21.

R. R. Hannas, Jr., M. D.

Dr. Clark K. Sleeth of Morgantown, Chairman of the Program Committee, announced that Dr. R. R. Hannas, Jr., of Kansas City, Missouri, will speak on the subject at the second general scientific session on Friday morning, August 20.

R. R. Hannas, Jr., M. D.

Dr. R. R. Hannas, Jr., a native of New Brunswick, New Jersey, is Director of the Emergency Physicians Group at Research and Independence Hospitals in Kansas City. He is currently serving as Vice Chairman of the Board of Directors of the American College of Emergency Physicians.

Doctor Hannas was graduated from Purdue University in 1939 and spent the next seven years with the United States Marine Corps. He resigned in 1946 as a Lieutenant Colonel to enter Harvard Medical School where he received his M. D. degree in 1950. He interned and served a one-year residency at the University of Kansas Medical Center in Kansas City.

He was engaged in general practice for twelve years in Sentinel, Oklahoma, and was active in the affairs of the Oklahoma State Medical Association. He was a member of that association's board of trustees for 10 years and also served as a contributing editor of the *Journal of the Oklahoma State Medical Association.*

Doctor Hannas left private practice to serve for three years as a full-time member of the staff of the American Academy of General Practice, where he was Director of the Division of Education. In conjunction with this assignment, he visited numerous medical schools in an advisory capacity and was active in defining the content of the new specialty of family practice and instrumental in assisting in its development.

Scientific Program Nearly Completed

Doctor Sleeth announced that arrangements have been nearly completed for the scientific program which will be presented during the three-day meeting. The other members of the Program Committee are Drs. Robert D. Crooks and William E. Gilmore of Parkersburg; Carl B. Hall of Charleston; and David Z. Morgan of Morgantown.

It was previously announced that Dr. Wesley W. Hall of Reno, Nevada, President Elect of the American Medical Association, had accepted an invitation to appear as a guest speaker at the first session of the Association's House of Delegates on Wednesday afternoon, August 18. Doctor Hall will be installed as President of the AMA at the annual convention in June.

Dr. Jack C. Willke and his wife, Barbara H. Willke, R. N., of Cincinnati, Ohio, will present a program on "The Family Physician's Role in Sex Education" at the second general scientific session on Friday morning, August 20.

Business Meetings Scheduled

The Pre-Convention Meeting of the Council will be held on Wednesday morning, August 18.

The first session of the House of Delegates will be held on Wednesday afternoon, and the final session on Saturday afternoon, August 21.

Additional details concerning the 104th Annual Meeting at The Greenbrier will be announced in future issues of *The Journal.*

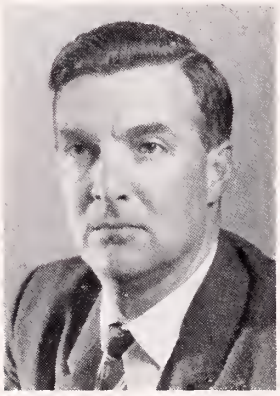
Cancer Conference Scheduled

The Seventh National Cancer Conference, co-sponsored by the American Cancer Society and the National Cancer Institute, will be held at the Biltmore Hotel in Los Angeles, California, September 27-29, 1972. There will be no registration fee.

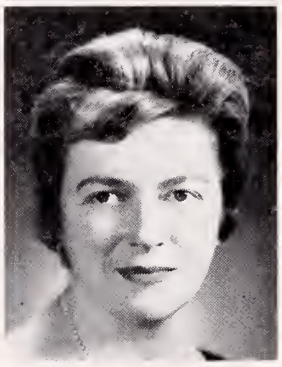
Such conferences are held each four years for cancer research workers and clinicians. Pre-registration and other information can be obtained from Sidney L. Arje, M. D., Coordinator, Seventh National Cancer Conference, c/o American Cancer Society, 219 East 42nd Street, New York, New York 10017.

AAGP Scientific Sessions Scheduled in Wheeling

The West Virginia Academy of General Practice will hold its 19th Annual Scientific Assembly Friday, Saturday and Sunday, April 30 and May 1-2, at Oglebay Park's Wilson Lodge in Wheeling. The program will be offered in cooperation with the West Virginia University School of Medicine, and the West Virginia Heart Association.



William K. C. Morgan, M. D.



Doris Howell, M. D.

A few speakers and topics remained to be announced as *The Journal* went to press, but the Friday morning, April 30, program will include the following:

"Diagnosis and Medical Management of Cyanotic Heart Disease," George H. Khoury, M. D., Director, Pediatric Cardiology Division, WVU Medical Center, Morgantown.

"Recent Advances in Cardiology," Michael Dean, M. D., WVU Medical Center.

"Surgical Treatment for Congenital Heart Disease," Thomas J. Tarnay, M. D., Associate Professor of Surgery, WVU Medical Center.

"Rheumatic Fever and Carditis," Roland E. Schmidt, M. D., Professor of Pediatrics and Acting Asisistant Dean for Curriculum, WVU School of Medicine.

Friday afternoon will offer round table seminars, and opportunities to visit exhibits.

Saturday Program

The Saturday morning program will be as follows:

A presentation by William Buckland, M. D., Professor of Psychiatry, University of Virginia School of Medicine, Charlottesville.

"Trauma in the Emergency Room," Donald S. Wenger, M. D., Chief, Section of Traumatology, Department of Surgery, George Washington University School of Medicine, Washington, D. C.

"Management of the Patient with Headaches," Perry S. MacNeal, M. D., Associate Professor of Clinical Medicine, University of Pennsylvania College of Medicine, Philadelphia.

"Front Line Antimicrobials," Gordon T. Stewart, M. D., Watkins Professor of Epidemiology and Professor of Medicine, Tulane University school of Medicine, New Orleans, and visiting professor, Cornell University Medical College.

"Ear, Nose and Throat Treatment in Your Office," Philip M. Sprinkle, M. D., Professor and Chairman of Otolaryngology, WVU School of Medicine.

"The Radiologic Diagnosis of Intestinal Obstruction in Infants," Joseph M. LoPresti, M. D., Chairman, Department of Radiology, Children's Hospital of the District of Columbia.

"The Aspects of Angiography in the Detection of Carcinoma," Mark H. Wholey, M. D., Associate Clinical Professor of Radiology, University of Pittsburgh, and Director, Department of Radiology, Shadyside Hospital in Pittsburgh, Pennsylvania.

A paper by Robert Irby, M. D., Associate Professor of Medicine, Medical College of Virginia, Richmond.

Saturday afternoon's agenda will include the following:

"Management of Cerebrovascular Disease," Robert Nugent, M. D., Chairman and Professor of Neurosurgery, WVU School of Medicine.

"And So to Bed: Some Thoughts of Bed Rest as a Form of Therapy," William K. C. Morgan, M. D., Professor of Medicine, WVU School of Medicine.

A presentation on cancer, William Ford, M. D.

A paper by Doris A. Howell, M. D., Professor and Chairman, Department of Pediatrics, Woman's Medical College of Pennsylvania, Philadelphia.

Sunday Program

The Sunday agenda will be sponsored by the West Virginia Section of the American College of Obstetricians and Gynecologists' Continuing Education Program. Topics will include:

"Family Planning and Contraceptives," "OB Anesthesia," "Induction of Labor," "Menopause and Its Management and Supervision" and "Genital Cancer, Reading and Interpretation of Pap Smears."

State AAGP officers include Drs. James E. Spargo, Wheeling, President; Joe N. Jarrett, Oak Hill, President-Elect; James H. Wolverton, Keyser, Vice President; Richard E. Flood, Weirton, Secretary, and Donald P. Brown, Kingwood, Treasurer.

Seminar in Blood Banking April 30-May 1 at WVU

The Department of Pathology, Division of Clinical Pathology, at the West Virginia University Medical Center will continue its program on education in laboratory medicine by sponsoring a Seminar/Workshop in Blood Banking on April 30 and May 1.

The program will be conducted by the staff and medical faculty of the Medical Center in Morgantown. The guest speaker will be Dr. P. J. Schmidt, Director of the Blood Bank, National Institutes of Health.

The registration fee will be $25, and those interested in the program should write to Blood Bank, West Virginia University Hospital, Morgantown 26506, or call 293-2241, for registration blanks and further information.

Cancer Cure Could Cause Problems for Hospitals

If mankind uncovered a cure for cancer tomorrow—and it was an expensive one—it would sound the "death knell" for the nation's voluntary hospital system.

This point was made during a discussion of management efficiency in hospitals at a recent Health Insurance Council conference on effective utilization of health care facilities and services in Chicago.

Pat N. Groner, Executive Director of Baptist Hospital, in Pensacola, Florida, explained it this way:

"Let's say that tomorrow we came up with a cancer cure. And let's say the cost turned out to be about $5,000 per cure.

"Now let's say that we could use this cure on about one in every fifty patients.

"Then, the story we would have to report to the public is that hospital costs had gone up considerably—and this fact would sound the death knell of the voluntary hospital system because the record shows people would be aghast and against the steep cost rise."

Cardiac Program Set for October

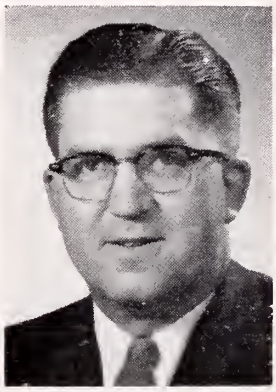
The American College of Cardiology, in cooperation with the West Virginia University School of Medicine, will sponsor a continuing medical education program entitled "Diagnostic and Therapeutic Approach to Cardiac Arrhythmias" October 7, 8 and 9 in Morgantown. Specific program details for these sessions, to be held at the WVU Medical Center, will be provided in a later issue of *The Journal.*

Here are some of the 22 West Virginia physicians who participated in the recent Second Post Graduate Seminar in Family Practice at West Virginia University's Medical Center. Other photographs appear in this issue of The Journal, or will be used in a future issue. Talking with Dr. David Z. Morgan (at right), Assistant Dean of the WVU School of Medicine, are (from the left) Drs. Donald P. Brown of Kingwood; Robert B. Hamilton and Terry T. Tallman, both of Fairmont; John L. Fullmer of Morgantown; William T. Lawson, also of Fairmont, and Frank J. Gavlas, Martinsburg.

Dr. Carl B. Hall Appointed To National AAGP Post

Dr. Carl B. Hall of Charleston was appointed Chairman of the American Academy of General Practice's Insurance Committee in action taken by the AAGP's Board of Directors at a recent meeting in New Orleans.

"The accomplishments of the American Academy of General Practice since its foundation are the result of devoted effort on the part of your predecessors on these committees over the years," Dr. James L. Grobe of Phoenix, Arizona, Chairman of the AAGP Board, said in a letter to Doctor Hall.



Carl B. Hall, M. D.

"I look forward with pleasure to working with you in the official family during this year," Doctor Grobe added. "Members of the Board of Directors and other Academy officers join me in congratulating you on your appointment . . ."

State Pediatrics Chapter Holds Spring Meeting

Guest speakers from the University of Pittsburgh and the University of Cincinnati were among those participating in the March 11 and 12 Spring Meeting of the West Virginia Chapter, American Academy of Pediatrics, at the Holiday Inn in Parkersburg.

Paul C. Gaffney, M. D., Professor of Pediatrics at Pitt, spoke on "Malignancies of Childhood" and "Hemangiomas." Irwin J. Light, M. D., Assistant Professor of Pediatrics at Cincinnati, had as his topics "The Infant of the Diabetic Mother," and "Infections of the Newborn."

Other speakers and their topics included:

W. Gene Klingberg, M. D., Professor and Chairman of the Department of Pediatrics at the West Virginia University Medical Center, "The Juvenile Diabetic is Different."

George Khoury, M. D., Associate Professor of Pediatrics at WVU, "Cyanotic Congenital Heart Disease, Diagnosis and Treatment."

Alexander Fakadej, M. D., Assistant Professor of Neurology and Pediatrics at WVU, "Considerations on the Floppy Infant."

Ruth M. Phillips, M. D., Associate Professor of Pediatrics, WVU, "Diagnosis and Management of Cystic Fibrosis."

Barbara Jones, M. D., Professor and Assistant Chairman of Pediatrics at WVU, welcomed the speakers and other participants in her role as President of the American Academy of Pediatrics' West Virginia Chapter.

New Law Plagues Quebec Doctors

(Reprinted from the November 17, 1970, issue of the Medical Post, Toronto).

Faced with a totally untenable situation, specialists in Quebec are gradually liquidating their assets in order to be free to move should the political climate regarding Medicare not be resolved.

Controversial Bill 41, which ordered the specialists back to work after their strike in October, has made the physicians indentured servants of the state for a period of 90 days. Under present law, specialists may not stop their work, reduce the number of patients they see, charge more than the government has agreed to pay or leave the province.

The penalties for not abiding by these dictates include fines of from $200 to $500 a day and a month's imprisonment.

Enforcing this bill is the task of a one-man "inquiry commission" to be chosen by the government, paid by the public funds and able to retain the services of others where necessary.

In effect this one individual will become the physician's taskmaster. He will advise the Quebec government if the population does not have access to the usual medical services or if for some reason these services have become inadequate.

Should the government decide that reduction in services represents a concerted effort on the part of the doctors to withdraw their services or if there is any possibility of "endangering" the health of the population, it can force the doctors to practice for a further 60 days. This two-month extension could be imposed indefinitely until July 1, 1972. The first extension could come Nov. 15.

Furthermore, any physician found not to have attended to his normal practice on any particular day must be prepared to defend his reasons for not following his routine in order not to be found "guilty."

The bill states that if a doctor is absent from the province, even if he has taken a job elsewhere, he is still subject to the law. Apart from prosecuting the physician if he returns to the province, the government's only recourse would be to seize the doctor's possessions—hence the reason for liquidation of personal effects.

There have been some concessions by the government which have mollified the profession somewhat but really have not made the bill much more palatable.

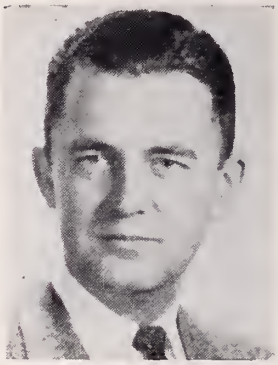
Medical School Costs

The cost of attending a medical school averages well over $4,000 a year, figures compiled by the Health Insurance Institute have confirmed. It said that the cost averages $3,421 for single students, and $5,727 for married students with no children. For those with two children or more, the average climbs to $6,310.

Cancer Teaching Day Program Topics, Speakers Announced

Anthony Shaw, M. D., Associate Professor of Surgery at the University of Virginia Medical School in Charlottesville, will be the guest speaker for the seventh annual Cancer Teaching Day program April 17 at the West Virginia University Medical Center in Morgantown.

Anthony Shaw, M. D.



Alvin L. Watne, M. D.

Serving as Chairman for the program, to deal generally with tumors in children, is Alvin L. Watne, M. D., Charleston Foundation Professor of Cancer Research at WVU. Registration is scheduled for 8:15 A.M. on April 17, with the program in the Medical Center Auditorium to run from 9:00 A.M. to 1:00 P.M.

Frank W. McKee, M. D., Dean of the WVU School of Medicine, will welcome the program participants. The complete list of topics and speakers follows:

"DNA Damage/Repair in Relation to Inherited Tumor Liability," Havelock Thompson, M. D., Professor, Department of Pediatrics, WVU Medical Center.

"Skin Tumors in Children," William A. Welton, M. D., Associate Professor and Chairman, Dermatology, WVU Medical Center.

"Diagnosis and Treatment of the Common Bone Tumors in Children," Karl D. Bowers, Jr., M. D., Clinical Assistant Professor, Orthopedic Surgery, WVU Medical Center.

"Tumors of the Newborn," Doctor Shaw.

"Childhood Lymphomas," Barbara Jones, M. D., Professor, Department of Pediatrics, WVU Medical Center.

Panel discussion on "Wilm's Tumors," with Doctor Jones serving as Chairman and Doctor Shaw; D. Franklin Milam, M. D., Professor of Urology at the WVU Medical Center, and Alptekin Ucmakli, M. D., Assistant Professor of Radiology, serving as panelists.

The program will be sponsored by the Charleston Foundation; the West Virginia State Medical Association's Cancer Committee; the West Virginia

D. Franklin Milam, M. D.

Barbara Jones, M. D.

Division of the American Cancer Society, and the Medical Center.

Application has been made with the American Academy of General Practice for four hours of Category I credit for the program.

Attorney Sees Way To Keep Malpractice Insurance

Crawford Morris, of the law firm of Arter & Hadden in Cleveland, Ohio, has proposed a three-point plan to help keep malpractice insurance for doctors alive.

According to Mr. Morris, "the insurance industry's experience (with malpractice insurance claims) has proved so bad it simply does not want to stay in this field."

Should this insurance be taken off the market, he said, it would be a grave blow to the medical profession. He explained:

". . . Very few hospitals and certainly no doctors can afford to be self-insurors at a million dollars a verdict for very long.

"And there have been four malpractice verdicts over $1 million, and numerous verdicts over $100,000 in recent years.

"The question then is what we are going to do about this rapidly vanishing American—the medical malpractice insurance policy which is the sine qua non of our present way of life."

This was his answer, "based upon a collection of the views of others:"

"First, reduce the patient's need to sue.

"Second, reduce the patient's ability to sue (but not abolish the right to sue).

"Third, reduce the cost and increase the availability of private industry malpractice insurance."

The rationale of his plan, Mr. Morris said, is "that most patients, being decent persons, do not want to bring a lawsuit against their doctors and hospitals . . . and if they are made financially whole insofar as out-of-pocket expenses are concerned, many of them will not hire a lawyer and bring a lawsuit to blame the doctors."

Mr. Morris' remarks were made at a recent Health Insurance Council conference on effective utilization of health care facilities and services in Chicago.

The Health Insurance Council, which is supported by the nation's insurance companies, provides technical assistance on health insurance to the health care professions.

Vaccine for Mononucleosis Under Development

Scientists at Northwestern University may be on their way toward developing a vaccine for mononucleosis, the National Society for Medical Research has reported.

Antigens from red blood cells of beef and sheep are under experimentation at the University. If they are found ineffective as a vaccine, the antigens might at least be used as a skin test for the disease, the Society explained.

Pictured above are 12 of 22 West Virginia physicians who took part in a Second Post Graduate Seminar in Family Practice held recently at the West Virginia University Medical Center in Morgantown. Five of the physicians (in the left photo) look over some clinical test results with Dr. Edmund B. Flink, Chairman and Professor of Medicine at the WVU School of Medicine. From left to right are Doctor Flink; Drs. Marshall J. Carper, J. L. Mangus and W. Edward Duling, all of Charleston; William D. Crigger of South Charleston, and Donald E. Cunningham, St. Albans. In the right photo (left to right), Drs. L. Dale Simmons of Clarksburg, Charles T. Lively of Weston, Joseph B. Reed of Buckhannon, Donald R. Roberts of Elkins, Asel P. Hatfield of Harrisville, Clyde A. Burgess of Philippi, and Robert D. Hess of Bridgeport talk with Dr. John Harley, Associate Professor and Chairman of Hematology at the School of Medicine.

State ACS Chapter To Hold Annual Meeting

A full program of scientific papers, social activities and a business meeting is scheduled for the Annual Meeting of the West Virginia Chapter of the American College of Surgeons April 29-30 and May 1 at The Greenbrier in White Sulphur Springs.

The top three papers submitted in competition among surgical residents in the State again also will be read during the meeting.

A. Thomas McCoy, M. D.

Charles D. Hershey, M. D.

First Scientific Session

The first scientific session will be held Thursday morning, April 29, with Dr. Herbert G. Dickie of Wheeling, President of the West Virginia Chapter, presiding. The opening lecture will be the first-prize resident paper, "The Effect of Vitamin A on Cortisone Induced Ulcers in the Rat," by Frank C. Griswold, M. D., West Virginia University Medical Center, Morgantown.

Other papers and speakers will include:

"Percutaneous Cholangiography," J. Roy Lancaster, M. D., WVU Medical Center.

"Carcinoma of the Colon," Barton McSwain, M. D., Professor of Surgery, Vanderbilt University School of Medicine, Nashville, Tennnessee.

"Recent Advances in Colostomy Care," Mrs. Betty Burdette, R. N., Memorial Hospital, Charleston.

"Alveolar Cell Carcinoma of the Lung," Robert J. Gardner, M. D., WVU Medical Center.

"Review of Carcinoma of the Thyroid in the Hospitals of Kanawha County, West Virginia, 1950-1970," Billie Atkinson, M. D., Memorial Hospital, Charleston.

Friday Session

Dr. Alvin L. Watne of Morgantown, Secretary-Treasurer of the West Virginia Chapter, will preside at the Friday, April 30, scientific session. After the second-prize resident paper, "Innervation of the Diaphragm—Its Application to Thoraco Abdominal Incisions," by M. Venugopal, M. D., Memorial Hospital, Charleston, the program will include:

"Subcutanous Mastectomy with Immediate Replacement by Silastic Implant," Ghassan A. Khalil, M. D., Parkersburg.

"Carcinoma of the Breast," Doctor McSwain.

"Breast Cancer Palliation," Thomas H. Covey, M. D., WVU Medical Center.

"Milk and Maalox—Fact or Fancy?" William O. McMillan, Jr., M. D., Charleston.

Saturday Program

The third-prize paper submitted in the resident competition will be read as the Saturday morning, May 1, session gets under way with Dr. David B. Gray of Charleston, Vice President, presiding. The prize paper, "Post Obstructive Diuresis Syndrome" by Gerald A. Ravitz, M. D., WVU Medical Center, will be followed by these presentations:

"Surgical Injuries of the Ureters," A. Thomas McCoy, M. D., Charleston.

"Why the Injured Patient Dies," R. Adams Cowley, M. D., Director, Shock-Trauma Research Unit, University of Maryland School of Medicine, Baltimore.

Dr. Charles D. Hershey of Wheeling, ACS Governor for West Virginia, and Dr. Andrew Mayer of Chicago, Illinois, Assistant Director of the American College of Surgeons, will address the Chapter.

The West Virginia Chapter will elect new officers at a business meeting following the Saturday morning scientific session.

State ACS Councilors include Drs. Harry Cooper of Beckley, William Gilmore of Parkersburg, Edgar F. Heiskell of Morgantown, William E. Lawton, Jr., and T. P. Mantz of Charleston, I. Ewen Taylor of Huntington, James Thomas of Bluefield and John Trenton of Kingwood.

Symposium on Anesthesiology To Be Held in Cleveland

A post graduate "Anesthesiology Symposium" is scheduled at the Cleveland Clinic Educational Foundation on April 14 and 15.

Guest lecturers who will assist Foundation staff members in the course will include:

I. A. Sloan, M. D., Senior Anesthetist, Hospital for Sick Children, Toronto, Canada; Alon P. Winnie, M. D., Associate Director, Division of Anesthesiology, Cook County Hospital, Chicago, Illinois.

Nikaan Anderson, M. D., Professor of Anesthesiology, Case Western Reserve University, Cleveland; and Felicissimo Buenafe, M. D., Department of Anesthesiology, Children's Hospital, Akron, Ohio.

The registration fee for the course is $60. Additional information may be obtained from Walter J. Zeiter, M. D., Director of Education, The Cleveland Clinic Educational Foundation, 2020 East 93rd Street, Cleveland, Ohio 44106.

Vitamin C Dissenter

U. S. Food and Drug Commissioner Charles C. Edwards, M. D., has called Vitamin C usage for preventing or curing colds "ridiculous," and has described as "unwarranted and unnecessary" a public stampede to buy the vitamin. In other words, Doctor Edwards was quoted by Health Insurance Institute, the public is wasting its money.

Medical Education Conference To Cover Many Topics

"Who Should Do What" will be among basic questions up for study during the Second State Medical Education Planning Conference at Charleston's Daniel Boone Hotel Saturday and Sunday, April 24 and 25,

Sponsored by the West Virginia State Medical Association's Committee on Medical Education and Hospitals, the Conference will review what has, and has not, been accomplished since the first such program in November, 1966.

Frank W. McKee, M. D.

It will delve into current programs in continuing medical education in other parts of the nation; new and planned programs in West Virginia; and specific roles hospitals should play in medical education efforts.

The role of the West Virginia University School of Medicine in health concerns of the state will be outlined by Frank W. McKee, M. D., the school's Dean, in one of the April 24 program highlights.

More than 100 physicians and lay people representing several committees and sections of the Medical Association; the West Virginia Joint Council on Teaching Hospitals; hospital medical education programs; WVU's School of Medicine; government and voluntary health agencies, and various professional societies have been invited to the Conference.

Other key speakers will include C. H. William Ruhe, M. D., Director of the American Medical Association's Division of Medical Education with offices in Chicago; LeRoy C. Erickson, Director of Educational Activities for the Pennsylvania Medical Society's Council on Education and Science, and Clement R. Brown, Jr., M. D., Director of Medical Education at Chestnut Hill Hospital in Philadelphia, Pennsylvania.

Saturday Agenda

P. A. Tuckwiller, M. D., of Charleston, Chairman of the Medical Association's Committee on Medical Education and Hospitals, will preside at the Conference's first two sessions at 1:00 and 7:00 p. m. on Saturday, April 24. Daniel Hamaty, M. D., also of Charleston and the Committee Vice Chairman, will be in charge of the 9:00 a. m. session on April 25.

Doctor Hamaty will set the stage for discussions to follow by reviewing "Accomplishments and Failures Since the 1966 Conference" at the beginning of the April 24 afternoon meeting.

He will be followed by Doctor McKee; Doctor Ruhe, who will outline "National Trends in Medical Education," and Mr. Erickson, who will describe features of the state medical society's education program in Pennsylvania.

The latter part of the afternoon program will provide representatives of government, voluntary and other health groups with opportunities to make short presentations on "Who Should Do What," and to make recommendations with respect to medical education and related matters.

The Saturday evening, April 24, program will include these presentations under the general heading of "New West Virginia Programs in Medical Education:"

Cooperation between the WVU Medical Center Staff and practicing physicians, Thomas Covey, M. D., Assistant Professor of Surgery at WVU and a West Virginia Regional Medical Program staff member.

Activities and plans of the West Virginia Joint Council on Teaching Hospitals, David Z. Morgan, M. D., Assistant Dean of the WVU School of Medicine and Chairman of the Joint Council.

A review of the Selective Experience Program under which WVU medical students now may spend part of their fourth year in community hospitals, Roland E. Schmidt, M. D., Acting Assistant Dean for Curiculum at the WVU medical school.

A new voluntary self-audit program being developed as an additional educational aide for West Virginia physicians, Doctor Hamaty.

Educational projects currently under way and proposed within the Regional Medical Program structure, Charles D. Holland, Director of RMP in West Virginia.

Agenda for Sunday

Doctor Brown will provide "An Overview of the Community Hospital's Role in Medical Education" at the beginning of the Sunday morning, April 25, session.

This will be followed by workshop sessions primarily for medical education and program directors at hospitals in the state to make recommendations for further development of student, internship-residency and post graduate education.

The workshops will deal with the general areas of medicine and family practice; surgery; obstetrics and gynecolocy, and pediatrics.

Charles E. Andrews, M. D., Provost for Health Sciences at the WVU Medical Center, will serve as moderator for a discussion period at which workshop reports will be received and Conference conclusions will be summarized.

Adjournment will follow at noon.

Symposium on Rheumatic Diseases In Louisville April 22

The seventh annual Rheumatic Disease Symposium, jointly sponsored by the University of Louisville School of Medicine and the Kentucky Chapter of the Arthritis Foundation, will be held on Thursday, April 22. The all-day conference is scheduled for the Amphitheater of the new Health Science Medical Center, University of Louisville Medical Center, in Louisville, Kentucky.

The program will focus on recent advances in rheumatology, with selected topics including current information on immunologic aspects of rheumatoid arthritis, unusual joint disorders following renal transplants, new approaches to the use of immunotherapy, helpful techniques in the differential diagnosis of various arthritides, and an appraisal of the new total hip arthroplasty procedure.

The program director, Dr. David H. Neustadt, Chief of Section on Rheumatic Diseases, University of Louisville, announced that the conference will consist of morning and afternoon sessions with lectures and panel discussions presented by a visiting faculty of nationally known authorities and outstanding teachers, and medical staff from the University of Louisville. Guest faculty will include:

J. Claude Bennett, M. D., Professor of Medicine and Chairman of the Department of Microbiology at the Medical College of Alabama; Paul Bilka, M. D., Clinical Professor of Medicine, University of Minnesota Medical School; John Decker, M. D., Chief, Arthritis and Rheumatism Branch, National Institute Arthritis and Metabolic Diseases; Evelyn Hess, M. D., Professor of Medicine and Director, Immunology Division, University of Cincinnati Medical Center; Robert Irby, M. D., Associate Professor of Medicine, Medical College of Virginia; Alex Norman, M. D., Professor of Radiology, Mt. Sinai School of Medicine and Director of Radiology, Hospital for Joint Disease, New York; and Lowell F. Peterson, M. D., Department of Orthopedic Surgery, Mayo Clinic, Rochester, Minnesota.

There is no registration fee. Further information and a program are available through Symposium Program Committee, Kentucky Arthritis Foundation, 1381 Bardstown Road, Louisville, Kentucky 40204.

Maryland Medical Meeting In Baltimore, May 12-14

The 173rd annual meeting of the Medical and Chirurgical Faculty of Maryland is scheduled for May 12, 13 and 14 at the Baltimore Civic Center.

An outstanding scientific program has been arranged to feature many prominent lecturers along with pediatric, medical and surgical grand rounds, Executive Secretary John Sargeant of the Society has announced.

A detailed program and reservation forms may be obtained by writing to Mr. Sargeant at 1211 Cathedral Street, Baltimore, Maryland 21201.

Medical Meetings

The following is a partial list of national, state and district medical meetings scheduled in the coming months.

1971

April 2-3—AMA Cong. on Socio-Economics of Health Care, Las Vegas.
April 14-17—Am. Gyn. Soc., Phoenix.
April 14-17—W. Va. Acad. of Oph. and Otol., White Sulphur Springs.
April 18-22—Am. Assn. of Neu. Surg., Houston.
April 24-25—W. Va. Conf. on Med. Educ., Charleston.
April 26—May 1—Am. Acad. of Neurology, New York.
April 26-28—Am. Assn. for Thoracic Surg., Atlanta.
April 28-May 1—W. Va. Chap., ACS, White Sulphur Springs.
April 28-May 1—Am. Ped. Soc., Atlantic City.
April 29-May 2—W. Va. Chap., AAGP, Wheeling.
May 1-5—Am. Psy. Assn., Washington.
May 3-7—Am. Col. of Ob. & Gyn., San Francisco.
May 10-14—Ohio Medical, Columbus.
May 16-19—Am. Thoracic Soc., Los Angeles.
May 16-20—Am. Derm. Assn., Sky Top, Pa.
May 16-20—Am. Urol. Assn., Chicago.
June 17-18—Am. Rheumatism Assn., New York.
June 20-24—AMA, Atlantic City.
June 22-23—Am. Diabetes Assn., San Francisco.
Aug. 19-21—104th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.
Aug. 23-26—Am. Hosp. Assn., Chicago.
Sept. 9-11—Am. Assn. of Ob.-Gyn., Hot Springs, Va.
Sept. 13-17—Int. Conf. on Coal Workers Pneumoconiosis, New York City.
Sept. 17-18—W. Va. Heart Assn., Clarksburg.
Sept. 20-24—Am. Acad. of Oph. and Otol., Las Vegas.
Sept. 21-23—Ky. Medical, Louisville.
Sept. 23—Rural Health Conference, Jackson's Mill.
Oct. 1-8—AAGP, Miami Beach.
Oct. 3-7—Pa. Medical, Pittsburgh.
Oct. 11-14—Ind. Medical, Indianapolis.
Oct. 14-17—Va. Medical, Arlington.
Oct. 16-21—Am. Acad. of Ped., Chicago.
Oct. 16-20—Am. Soc. of Anes., Atlanta.
Oct. 18-22—ACS, Atlantic City.
Oct. 24-28—Am. Col. of Chest Phys., Philadelphia.
Nov. 3-6—Am. Soc. of Cyt., Washington.
Nov. 9-16—Am. Heart Assn., Anaheim, Calif.
Nov. 28-Dec. 1—AMA Clinical, New Orleans.
Dec. 4-9—Am. Acad. of Derm., Chicago.
Dec. 5-7—Am. Acad. of Hema., San Francisco.

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Jan. 24-26—Soc. of Thoracic Surg., San Francisco.
Feb. 4-12—Am. Soc. of Clin. Path. & Col. of Am. Path., Atlanta.
March 1-5—Am. Col. of Cardiology, Chicago.
March 2-4—Central Surg. Assn., Chicago.
March 6-7—Int. Acad. of Path., Chicago.
March 27-30—Southeastern Surg. Cong., Washington.
April 3-8—Am. Col. of Rad., Bal Harbour, Fla.
April 13-18—Am. Derm. Assn., Dorado Beach, P. R.
April 16-20—Am. Assn. of Neu. Surg., Boston.
April 16-21—ACP, Atlantic City.
April 17-20—Am. Col. of Ob. & Gyn., Chicago.
April 24-29—Am. Acad. of Neurology, St. Louis.
April 26-29—Am. Ped. Soc., Atlantic City.

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Medicine and Psychiatry in the Seventies: A Perspective*

Perry C. Talkington, M. D.

Saint Augustine said that the past is memory and the future begins in the present. Memories, though, leave traces which may condition the future. Some of our great city thoroughfares and national highways follow the cattle trails of a century ago. The cattle themselves shaped the traffic patterns of today. A look into the past and present may help us glimpse the future of American medicine and psychiatry in the next ten years.

Until about 200 years ago the rate of social and technological change was hardly noticeable in one person's lifetime.[21] The accelerative thrust of change gathered force in this century and neither the rapidity nor the intensiveness of change is diminishing. Pressures for change continue to come in shock waves of increasing force and rapidity. The entire system of society is undergoing violent upheaval. Change is the process which shapes the future. Let us then examine some of the interfaces of change reaching both into the past and toward the future.

In any new or underdeveloped country, wealth is first produced through agriculture. Manufacture then becomes a source of national enrichment. As a greater portion of wealth is produced through industry, the percentage of wealth produced through agriculture declines. As national wealth increases, the population's demands for goods and services increases.

No nation in the history of the world has grown as fast and accomplished as much or extended and exerted its influence on other nations than has this country in the short 194 years of its existence. It has undergone periods of unrest and social change throughout its history. But the changes which are taking place now, and others which are emerging and generating other changes, will reshape and restructure every aspect of American life. This holocaust of change compels our participation and our commitment to developing a planned response to change.

The Author

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Today, we are in the midst of a rapid and exciting phase of transition, of vast social, economic, political, and scientific and technological change. Our country has gone through the agricultural era, a series of industrial revolutions brought about by the scientific discoveries of the 19th century, and during the 1940s moved into a "post-industrial" or service era in which the weight of the economy shifted from the product sector to the service sector.[22] This structural change in the economy is seen in the extraordinary growth of health services. In 1950, health services was listed seventh among the 77 categories in the Industry Classification List; this year it is expected to be ranked first.[17] From an agrarian economy we have become a service economy. Other technologically advanced countries are moving in the same direction.

The changing patterns of our post-industrial society are complicated by other factors for change: (1) population explosion, (2) population implosion, (3) heterogeneity of the population, (4) accelerated tempo of technological

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change, and (5) a chaotic society, which one author[5] refers to as a product of the social morphological revolution.

The Population Explosion.—According to the 1900 census, there were about 76 million people in the United States. By 1960, the population of the nation numbered more than 180 million; today there are about 204 million. It is projected that by 1975 there will be over 230 million, and by 1990 in the neighborhood of 300 million.[5] Today, about 31 per cent of our population is under 15 years of age; 50 per cent is below 25 years of age. Life expectancy has increased in all of the more advanced countries.

The rate of growth of the world population has been equally stupendous. In the mid-17th century the world population had reached about one-half billion. About 1825, it reached one billion. It required only 105 years more to reach the two billion mark, by 1930; only 30 years more to reach three billion, by 1960.[5] And, in spite of efforts to reduce the birth rate, the United Nations' projection gives a world population of 6.1 billion by the end of this century.

Population Implosion.—The "population implosion" or urbanization is viewed with even more concern than the population explosion. Towns and cities did not emerge until about 5,500 years ago. Increased technological and social organization did not permit the development of cities of one million or more until the mid-19th century. In 1850, only four cities on the face of the earth had a population of one million or more; by 1960, there were 141, and today's urban population is increasing by 6.5 per cent per year.[21] It is said that 25 per cent of the earth's population can be found in the industrialized societies.

It was not until 1920 that the United States became an urbanized nation, with more than 51 per cent of the population living in cities.[5] Today, about 2 per cent of our land area contains about 75 per cent of our people.[17] Cities coalesce into megalopolises. The central part of our country is being decimated while the coastal littorals and strip cities are gaining rapidly. It is predicted that all of the people added to our population in the future will be added to cities. This highly concentrated population, using large amounts of power or energy to sustain itself, has led to serious air and water pollution and has generated and aggravated a host of other problems—physical, social, personal, institutional, and governmental.

Heterogeneity of the Population.—Although today immigration has reduced to a trickle the number of foreign-born whites, our population is heterogeneous. In 1850, native whites made up 74.6 per cent of the population, and "non-whites," mainly Negroes, 15.7 per cent. In 1960, there were 20.7 million non-whites in the United States, or about 11.4 per cent of the total population. The migration of Negroes from the South to the North and West greatly increased during and after World War II, and there is a greater concentration of Negroes in the core cities of the urban metropolitan areas. By 1960, 51 per cent of all Negroes lived in the central cities, and this trend is expected to continue.[5]

Accelerated Tempo of Technological Change.—More technological advances have been made in the past 50 years than in the previous 5,000.[22] The number of scientists now alive is larger than all of the scientists in all the ages of man put together before 1920.[2] It is said that we shall make more technological progress in the next 25 years than was made in the last 250 years. In the last century, we have increased our speeds of communication by a factor of 10;[7] our speeds of travel by 10;[2] our speeds of data handling by 10;[6] our energy resources by 10;[3] our power of weapons by 10;[6] and our ability to control diseases by something like 10.[2, 20]

We are confronted with the explosive progress of technology and the exponential growth of medical and scientific knowledge. One writer observes that "what has been learned in the last three decades about nature and living things dwarfs in extent the knowledge of any comparable period of scientific discovery in the history of mankind."[21] He points out that, on a worldwide basis, scientific and technical literature is mounting at the rate of 60 million pages a year. A physician today must learn each year as much as he learned in any one year in medical school.

In comparison, less is known about the earlier maturation of man. It is known, however, that children mature more rapidly than they did.[16, 21] Girls reach their menarche two and one-half to three and one-half years earlier than they did 100 years ago; the age of first menstruation continues to drop four to six months every decade. The population grows taller sooner; eleven-year-olds today are four inches taller than their grandparents were at the equivalent age. Our young people, products of television, with instant access to an information explosion, become precocious at a much earlier age; questioning the values we stand for and the current condition of society, they demand "instant" changes.[21]

Despite the unprecedented compression of time and space, computerization, automation,

and instant communication, man still is confronted with the limited pace of human response to new and changing concepts and life styles.[21] The question raised here is, are those people who are aware of, and attempt to keep pace with, the accelerating speed of change beginning to reach the limits of their coping capacity?

A Chaotic Society.—The combined effects of these developments have created conditions which are affecting society as a whole and are producing radical changes in patterns of behavior and living. In a world in transition from the small community or city to a complex mass society, there are frictions, confusion, and dissonance.[21] Our society consists of layers of diverse cultures in which people react to change in different ways and at different rates of speed.[5] Some live in an agricultural culture; some in an early industrial culture; some in an advanced phase of industrialism. The majority live in, or are affected by, the postindustrial or service era; and an estimated two million already have entered the life style of a post-service "supraindustrial" society. There are extreme ranges of social conditions, not only in the different areas of the country, but also within the same area. Frictions at the interfaces of these diverse cultural layers tend to diminish understanding and produce discord.

Problems exist that did not exist 20 years ago, such as population density, riots in ghettos and on college campuses. Air, water, and soil pollution have reached dangerous levels. Protest, conflict, and violence are epidemic. We see growing hedonistic elements in our culture, emotional insecurity and uncertainty resulting from the impact of change, age imbalance, overcrowding, automation, civil rights, Viet Nam, the "Bomb," racism, inflation, poverty, affluence, and a host of related problems. We face the problems of legalized abortion, the "pill," euthanasia, drug abuse on a massive scale, and the emerging concept of genetic engineering and the technological possibility of controlling human behavior and changing personality in radical ways.

Families are becoming more and more fragmented. Man's relationships with places, things, and people are more and more transient. People are more rootless than ever before. Fifteen per cent of our new individual housing is mobile.[22] Between March 1967 and March 1968, 36 million Americans (not counting children less than one year old) changed their place of residence; and movement on this massive scale occurs every year in the United States.[21] We are simultaneously experiencing a youth revolution, a sexual revolution, a racial revolution, protracted international conflict, and a revolution in social and economic theory, and in politics, education and medicine. We are in the midst of a storm of crises, on which the speed and force of change has a multiplier effect. Few of us have the wisdom to speak with any precision or certainty about the future, nor the solid facts on which to base predictions. Facts are perishable today; the national scene is shifting so rapidly and to such an extent that what is fact today may be fallacy tomorrow.

But perhaps a look into our medical past and present will provide some perspective on the role of American medicine in this decade.

Our Medical Past And Present

Changing Public Attitude Toward Medical Care.—Professor Lawrence Henderson identified the period 1910-12 as the Great Divide in United States medical care when "for the first time in human history, a random patient with a random disease consulting a doctor chosen at random stood better than a 50-50 chance of benefiting from the encounter."[15]

Since 1912, what is now described as a "cottage-type," "horse-and-buggy," "country store," and "pre-Model T" nonsystem system of health care has come to function in such a way that even medicine's severest critics say that Americans now have access to the finest medical care in history.

Delivery of quality medical care to all citizens has become a national goal. Access to quality medical care is identified not only as a civic right but also as a basic human right. It is estimated that 170 million Americans now receive fair to excellent medical care but that 30 to 40 million do not have access to this type of care, or do not know how to obtain it—and that half of the latter can't afford it.

The "horse-and-buggy" doctor took care of all patients, rich and poor, and did not ask for help. As time went by he asked the city and county to help him defray the costs of caring for the indigent. Today, government proposes to take care of the aged and the indigent and is shocked at the cost of paying for what physicians have in the past given freely.

The Changing Medical Climate

Rising Costs.—Between 1950 and 1968, the nation's expenditures for health care increased from $12.1 billion to $55.1 billion. The amount of money spent on health care in 1969 was $63

billion—more than double the $27 billion spent in 1960. Projections are that this figure will reach $140 billion per year by 1975.[3] Today, health care expenditures account for approximately six and seven-tenths per cent of our gross national product.

The government share of national health expenditures rose from 10 per cent in 1965 to 35 per cent in 1967, and continues to rise.[23] While the dollar amounts spent for health care have more than quadrupled since 1950, the combination of insurance outlays and government funds has reduced the patient's out-of-pocket expenditures from 64.9 per cent in 1950 to 44 per cent in 1967.[7] By 1965, 50.1 per cent of persons covered under employee-benefit plans had their protection entirely paid for by the employer, 47.5 per cent shared the cost in some proportion with the employer, and *only two and four-tenths per cent paid the full cost of their health insurance.*[6]

Physicians' fees have been rising at an average rate of six to seven per cent for the past 10 years, and indications are that there will be a rise of around nine per cent this year. Hospital costs are rising at an extraordinary rate. The average daily cost of caring for a short-term patient in a general hospital has gone from $58.06 in 1967 to $70.70 in 1969. In some larger cities it has already gone considerably beyond $100 a day. Dr. John Knowles has made the frightening projection that hospital charges may reach $200, $300, $400, and even $500 a day while many of us in practice today are still alive.[13]

The costs of Medicare and Medicaid are exceeding all predictions. The Medicaid program, alone, is costing about $5 billion a year—more than twice as much as officials estimated when the program was enacted by Congress. At the present rate, it has been estimated that it will reach $24 billion a year by 1975.[13] And it is a melancholy fact that the Medicaid program is not even beginning to meet the needs of those for whom it was designed.

In addition to this, insurance premium rates, including prepaid group plans, have been climbing by 10 per cent a year for the past decade. And there are signs of steeper increases. The Federal Employees Health Benefits Program premium rates have increased dramatically since the program was initiated, and it is predicted that the premium will double in five years.

The rise in health care costs in the past four years has been nearly two-and-one-half times as rapid as the rise in other living costs. It has been estimated that between 1965 and 1975 the cost of living will increase by 20 per cent, but in the same period the cost of health care will increase by nearly 140 per cent—at least seven times the cost of living increase.[23] And it is worthwhile noting that these striking increases in demands and costs are not confined to the United States, but seem to be worldwide and are occurring in countries with nationalized health care programs.

The Growth of Voluntary Health Insurance.—In 1940, only nine per cent of the civil population were covered by private health insurance. Today, some 85 per cent of the population have some form of private health insurance. Government at all levels covers 31.2 per cent. Our current voluntary health insurance system has helped more Americans to have more and better medical care than ever before in history. Nevertheless, there is increasing dissatisfaction with the present system, which focuses more on hospital care than on ambulatory care. Coverage in many instances is inadequate. The most comprehensive coverage is obtained through the large employee-benefit group plans, but even then significant gaps in coverage exist. Neither public nor private third-party plans provide adequate protection against the costs of mental illness, and the majority of plans mitigate against the use of the total spectrum of psychiatry. The American Psychiatric Association and its members have contributed much toward trying to reverse this in the past five years. It is difficult, however, to estimate with any degree of precision how many people are now covered for psychiatric care; the innumerable types of policies written by the large number of insurance carriers tend to obscure the data. It is safe to say that there is a 50-50 chance of psychiatric coverage in most group policies. But there still is a wide gap between the benefits provided for mental illness and those provided for physical illness.

The Growing Manpower Shortage.—Increasing demands for medical services and burgeoning government programs have tremendously aggravated the already current manpower shortage, critically affecting the delivery of services. This is further compounded by the geographical inequities in the distribution of manpower and facilities, especially in the rural and urban ghetto areas.

The productivity of the individual physician has been increased considerably by the use of technical aids and nonmedical personnel. Thirty years ago the average physician saw 50 patients

in a week. In 1964, the average number of patient visits per physician per week was reported to be 120. In 1940, the ratio of health workers for each physician was 5:1; in 1968 it was 13:1; and is expected to reach 17:1 this year.[18] At the same time there is an increasing number of special training programs throughout the country aimed at creating new types of physician assistants and subprofessional mental health workers.

There has been an increase in the number of physicians but a decrease in the number available for patient care. Only 60 per cent of all physicians are now in full-time practice. An increasing number are involved in postgraduate and continuing education, teaching and research, consultation, government and voluntary agency activities, and professional society activities.

In the face of a growing manpower shortage, the machinery for the training of general practitioners has been dismantled. Educational requirements for physicians are being lowered; internships are being abolished and residency training programs are being shortened. This may indicate that the broad horizons of medical education, practice, and research will be more limited in the years ahead. As Robert Merton points out in his introduction to *The Crowd*, the author, Le Bon, saw and emphasized, in his time, the tendency toward "leveling" in the crowd, "the demand for equality on the depressed level of mediocrity."[11] The reduction in education requirements may imply an encroaching mediocrity of American medicine.

Some Trends in Psychiatry

The pattern of American psychiatry is in the process of changing rapidly. It has changed enormously in the past two decades, and we can anticipate even greater changes in this decade. New treatment approaches, far different from the traditional patterns of psychiatry, are continually being developed. There is now a vast complex of new therapeutic settings and a growing armamentarium of diagnostic and therapeutic equipment and techniques.

There is a growing trend toward outpatient care and partial hospitalization. Increasing emphasis is being placed on prevention, short-term treatment, and rehabilitation. The community mental health center movement is still in the formative stage, but the concept of community psychiatry is growing. There has been a sharp decline in the resident population of state mental hospitals due to shorter stays and higher discharge rates, but this has been paralleled by the rising number of admissions. Concommitant with this trend, there is a wave of state purchase of psychiatric services on a fee-for-service basis from the private sector of psychiatry. There is a blurring of lines between the public and private sectors, both in costs and in services. Some state hospital systems now have programs as modern as day-after-tomorrow. Still there seems to be a growing belief that psychiatry can best be effected in the private sector.

What of the future? Clinical and therapeutic directions in the Seventies are more difficult to envision. In the light of present knowledge we are seeing the end of the age of neuroses and the beginning of the age of the sociopath. General paresis will return with syphilis on the upgrade in adolescents and homosexuals. We will have more behavior and personality problems, fewer manics, more schizophrenics, fewer hysterias, more anxieties, fewer hebephrenics, more paranoids, more drug addictions and alcoholism, more irritability and fatigue incident to overcrowding of the population.

There will be more group therapy, family therapy and counseling, conjoint marital therapy, and more work with family and group dynamics. There will be more preventive mental health programs and more facilities and programs for the aftercare and rehabilitation of psychiatric patients. Hospitals will be more automated. There will be more computerization of administration and, perhaps, of diagnosis. A retrieval system for patient records will replace the archival system, improving patient care and facilitating research.

The pressures of social and technological changes are multiplying the demands upon psychiatry. It is being asked not only for the solution to mental illness, but for the solution to things social, ethical, and moral. Recent advances in biochemistry, pharmacology, and related fields have focused attention on the technological possibilities for controlling human behavior and changing personality in dramatic ways.

The growing adolescent population poses a major problem. Modern youth demands instant solutions to all problems. They insist their future is now: their attitude is one of impatience and unwillingness to wait. Psychiatry is time-consuming. Stuart Hughes suggests that the demands of modern youth may destroy psychiatry as we know it today in America.[8]

The epidemic-like use of drugs and drug abuse, especially in the younger generation and at all

socioeconomic levels, is a problem of growing concern to all Americans.

There is the unresolved question of the medical model versus the sociological model for the delivery of psychiatric services. Today, psychiatry is an integral part of medicine. Lowering educational requirements for physicians, abolishing internships and shortening psychiatric residency training programs will seriously impair the education of the psychiatrist and sharply limit his unique contributions to his own field as well as to other areas of medical practice.[14] If this trend should continue, psychiatry will lose its identity as a component part of medicine; there will be little to distinguish a psychiatrist from a clinical psychologist or even a psychiatric social worker.

There is the controversial question as to what role psychiatry and psychiatrists shall play in resolving current social crises and conflicts and in shaping the quality of life in American society. The philosophy or ideology of some of the more active protagonists of this concept is that psychiatrists should take on the job of curing the ills of society, the evils of poverty, pollution, racism, wars, violence and civil disorders, and try to reshape the attitudes, values, and customs of society; the perennial dream of a world liberated from suffering and evil. The question is, how do we deal with such problems? Is this the province of the psychiatrist? Do we have the machinery and the expertise to shape public policy, to treat a sick society, to control conduct and behavior in a mass society? Can we create a more livable environment and correct social injustice?

The Modern Thinkers: Their Utopia

Throughout recorded history there have been highly intelligent people who have been able to see the ills of the world, its sickness, poverty, inequalities, social injustice, and war. They have devised plans for the elimination of these ills and have felt that they could solve all social, political, economic, or medical problems. Among them have been Euripides, Plato, Aristotle, Sir Thomas More and his Utopia, and the leaders of the communal societies in America. In North America there have been 150 such utopian communities, from the days of Emerson to Mr. Evans' Topolobambo.

Two such schools of thought have been particularly attractive to American intellectuals. One, Saint Simon, who, after the French Revolution, believed in the basic goodness and intelligence of people and felt that by education they could be taught to adopt a way of life which would do away with society's ills. The other, Hegel, also proposed a utopia, but was cynical about the goodness and intelligence of the population and proposed revolution as a means of achieving his goals. The battle between these two schools of thought has more or less openly raged for nearly four decades. Both schools of thought now feel that the Hegelians have won the field.

Lear points out that our Modern Thinkers have felt that the American Medical Association was too formidable to quell by a frontal attack—that it must be encircled.[10] They planned the institution of competitive organizations which would siphon away the members of the AMA and involve them in the broader aspects of society. Thus, the Social Security Act of 1935 and its subsequent Amendments. Therefore, the Madison Avenue approach to blacken the name of the physician. An ideology is designed as an instrument of power rather than an instrument for the welfare of the people.

Evaline Burns, professor of social work, Columbia University School of Social Work, says that Medicare, Medicaid, and other forms of federal health insurance have been developed under the guise of "insurance" as a method of providing everything pertaining to medical care —prevention, diagnosis, treatment, and rehabilitation—to the entire population without regard to income.[1] She says it is called "insurance" so the recipients can feel that they have contributed as taxpayers, or because of withholding, and therefore become "claimants" rather than "applicants." It is called "insurance" in order to avoid the opposition of organized medicine and the insurance industry. The "private" components of Titles 18 and 19 were included to avoid this same opposition. The private insurance industry has for the time being then been permitted to serve as fiscal intermediaries and the private sector of medicine permitted to see patients, again, for the time being. She and other modern thinkers feel that now the "private" clauses can be eliminated.

Now that we are in a "service" era, modern thinkers, for the first time in history, have the opportunity to institute their utopian plans on a vast scale. So among today's major national trends is the growing demand for compulsory national health insurance, which the modern thinkers feel will lead to a nationalized health service.

National Health Insurance

The demand for compulsory national health insurance and the complete restructuring of the

financing and delivery of medical services will be the overriding issue in American medicine in this decade. Within the past year almost every major news journal or periodical in this country has carried a special section or a lead article on the "national crisis in American medicine." A growing body of public opinion asserts loudly that our present system of financing and delivering health care is inefficient and incapable of meeting the needs of the people. We read that medicine is too important to be left in the hands of physicians; that private, solo, practice of medicine is incapable of providing high quality medical care; that the only form of medical practice that should be endorsed is closed panel comprehensive prepaid group practice; that, in light of major shifts now taking place in society, "the traditional practice of medicine cannot survive, nor should it"; that all hospitals should be operated as public utilities and that all doctors should be on salaries or on a contract basis. We repeatedly hear that the United States is the only major industrialized society without a national health care system, with financing related to the social security system.

Organized medicine, doctors, hospitals, and the private insurance industry are blamed for the spiraling costs of care, inequities in distribution, and the "inferior" quality of care provided in day-to-day medicine in this country. It is said that "health care is the fastest growing failing business in the nation—a $63 billion industry that fails to meet the needs of our people"; that the "private health insurance industry has failed us," and that the only solution lies in a compulsory national health insurance program and reorganization of our current system. Prominent in this strong repudiation of the American health care system are a powerful labor coalition, leading politicians, social scientists, technologists, economists, consumer groups, and national news writers.

Some 10 bills for national health insurance are now before the Congress and the Senate. The one that is receiving the most publicity and which holds the greatest implications for the future practice of medicine in America is the Reuther Plan (Committee of 100), co-sponsored by 15 leading Senators and introduced by Senator Kennedy as the Health Security Act. Another is the Griffith Bill, endorsed by the AFL-CIO, which is similar to the Reuther Plan. Others include the AMA's "Medicredit" plan, the Javits' plan, and Rockefeller's proposal, backed by the National Governors' Conference. Some of these advocate comprehensive health care "from the cradle to the grave" for all Americans without regard to income.

Some kind of national health insurance seems inevitable. The climate of opinion favors it. Whether it will be under private sponsorship or government sponsorship, or a mix of both remains to be seen. The plan receiving the most attention today would be administered by the federal government. The question that must deeply concern us is whether there will be a place in such a system for private insurance and the private practice of medicine, and the flexibility they provide. There are those who think that ultimately such a system cannot accommodate the private sector. However the problem is resolved, the final solution will affect every user of health care services and, possibly, depending on the solution reached, every taxpayer.

Decisions in regard to methods of financing and delivering health care services should therefore be made only after the most careful examination and study of all aspects of the problems involved. The difficulties and pitfalls encountered in foreign countries should be studied objectively. Our own experience with Medicare, and Medicaid in particular, which is beset by soaring costs, limited access to services, and personnel shortages should make the United States move cautiously in the direction of a government-controlled medical care delivery system.

Senator Ribicoff says that: ". . . the federal health effort has become a planless conglomeration of programs administered by more than a score of agencies and departments"; that federal health spending "instead of eliminating problems, may be adding to factors such as rising costs, limited access to care, and the fragmented organization of health services"; that instead of supporting programs to provide for the health of the people, "government is maintaining a cumbersome, disjointed bureaucracy that even key government officials have difficulty in managing"; and that "there are so many programs (federal) that no one—not even the HEW Department, the Bureau of the Budget, nor any private organization was able to tell his subcommittee how many programs there are."[24, 9] And President Johnson described the overlapping functions and responsibilities of the top-heavy federal medical bureaucracies as a "programmatic and bureaucratic nightmare."[4]

Experience In Other Countries

If we review past performance of government medicine in other countries, we find relatively little to encourage us.[18] Seventy-seven nations have public health insurance programs of one

kind or another, some of them with 20 years of experience.

The evidence at hand indicates that nationalizing health care has not kept costs from rising nor has it improved the general quality of care. Their experience illustrates the difficulties in providing medical care on a mass basis and the seeming impossibility of keeping costs down. Health care costs in many of these countries are moving in the direction of 10 per cent of the national budget. Sweden nationalized its health service in 1955; and experts have warned that Sweden's health bills could consume the country's entire budget within 20 years.[19]

The proponents for compulsory health insurance point out as one argument that the life expectancy in Sweden is far greater than the life expectancy in the United States. They fail to point out that the life expectancy of Swedes in America is greater than the life expectancy of non-Swedish Americans.

In these countries, monies for operation of the health care system fluctuate with the state of the national budget. Consequently, those programs which are funded in whole or in part by government tax revenues are in a chronic economic bind.

In most of these countries there are long waiting lists and, where it is permitted, more and more individuals are purchasing health insurance protection from the private sector even though they still pay for government medicine through taxation.

How Shall American Medicine Influence These Trends Of The Times?

There is no such thing as a typical physician. There are many types of physicians, ranging from the academician to the general practitioner. These include hospital-based physicians, private practitioners, those involved in group practice, in federal and state services, in voluntary organizations, in research, and a wide range of specialties and subspecialties and ideologies. Some are salaried and some function on a solo fee-for-service basis. They come in all shadings of political coloration.

In the face of these trends, we must discover a means of comparing the effectiveness of various models of delivery and methods of financing. We must arrive at expertly constructed alternatives to nationalized medicine. We must review the European experience and study all interrelated factors that will significantly affect the type, quality, and distribution of services. All those who are now planning for the complete reorganization of the health care system in the United States must be made aware of the medical viewpoint.

American medicine must decide whether, in the interest of the patient, it must steer a course between an inflexible monolithic national health service and today's fragmented units of service. We must propose systems of delivery and financing of services which will result in the best care for the greatest number of people. We must find ways to help shape the future, or our patients will be the victims of the future.

One author suggests, "America could develop a unique program of health care, based on its own needs, resources, and state of social and medical development. It could embrace an apparently American talent for ingenious combinations of public and private effort."[12] It cannot do so unless American medicine faces the current trends soberly, thoughtfully, and with responsibility.

A list of references may be obtained by writing The Journal.

All laughter is a muscular rigidity spasmodically relieved by involuntary twitching.

ROBERT BENCHLEY

An Extension of the Jones Method of Anterior Cruciate Ligament Reconstruction

K. Douglas Bowers, Jr., M. D.

The combination of complete anterior cruciate and fibular collateral ligament tear is a relatively uncommon athletic knee injury. The knee is most often injured when a valgus stress is applied with the joint partially flexed as the femur is internally rotated on the tibia. This mechanism results in damage to the tibial collateral and anterior cruciate ligaments and the medial meniscus, often referred to as O'Donoghue's triad.

To tear the fibular collateral and anterior cruciate ligaments simultaneously requires a varus stress as the femur is externally rotated on the tibia with the joint in some degree of flexion. This infrequently occurring mechanism may also traumatize the insertion of the popliteus and biceps femoris tendons, the ileotibial tract insertion, the peroneal nerve, and the lateral meniscus. The disability resulting from anterior and lateral instability may be just as extensive as that from anterior and medial instability secondary to O'Donoghue's triad.

Unless a specific contraindication exists, acute ligament tears in athletes should be repaired within 10 days. If delayed beyond this period, some form of ligamentous reconstruction may be necessary to restore joint stability.

For reconstruction of the anterior cruciate ligament, the Jones method appears to be the most satisfactory, though numerous procedures are available (Figure 1). Numerous reconstructions likewise have been described to correct chronic lateral instability. An extension of the Jones procedure corrects both anterior and lateral instability (Figure 2).

Basically, the original Jones technique is followed. We have used two minor modifications, which I am sure are not original.

The lateral aspect of the lateral femoral condyle is exposed by undermining the skin and retracting it laterally, rather than through a separate skin incision. The other modification is cutting a wedge of bone from the proximal tibia anteriorly, the apex of which is about two centimeters deep. The patellar tendon segment is placed in the depth of the defect, allowing a near normal course of the reconstructed ligament through the joint.

The Author

- **K. Douglas Bowers, Jr., M. D., Clinical Assistant Professor, Orthopedic Surgery, West Virginia University Medical Center, Morgantown.**

The patellar tendon-patella-quadriceps tendon segment is cut in routine fashion, but the quadriceps tendon section is made much longer. After placement of the new anterior cruciate ligament with the patellar section tightly pulled into the lateral femoral condyle tunnel, a second incision is made laterally exposing the fibular head. A tunnel is constructed just outside the joint capsule connecting the point of exit of the quadriceps section from the lateral femoral condyle with the head of the fibula. The quadriceps tendon section is then passed distally through the tunnel and firmly sutured into a groove cut in the fibular head.

A long leg cast is applied with the knee held in 160 degrees extension, slight valgus and neutral rotation. Quadriceps setting is begun immediately. As soon as the cast can be elevated by the patient, crutch ambulation is begun. The original cast is removed and a walking cylinder cast applied four weeks postoperatively. This is worn for an additional two weeks. Quadriceps exercises against gravity are then begun with progressive resistance exercises rapidly following.

The only reservation prior to attempting this procedure was whether or not the quadriceps tendon section would be long enough to reach the fibular head. This proved to be no problem.

Case Report

A 16-year-old high school football player was blocked by an opponent in a game on October 16, 1969. The force was applied almost entirely to the anteromedial aspect of the distal left thigh, as the knee was in partial flexion and the foot firmly planted. He experienced immediate pain laterally and there was rapid swelling.

Significant pain and disability lasted about two weeks, during which he ambulated with crutches.

His acute symptoms progressively subsided and he began to walk independently without much discomfort. His main complaint was frequent "giving way" of the knee laterally with normal walking and running. The knee remained swollen and was painful with even mild exertion.

He was referred to our office and first examined on November 25, 1969.

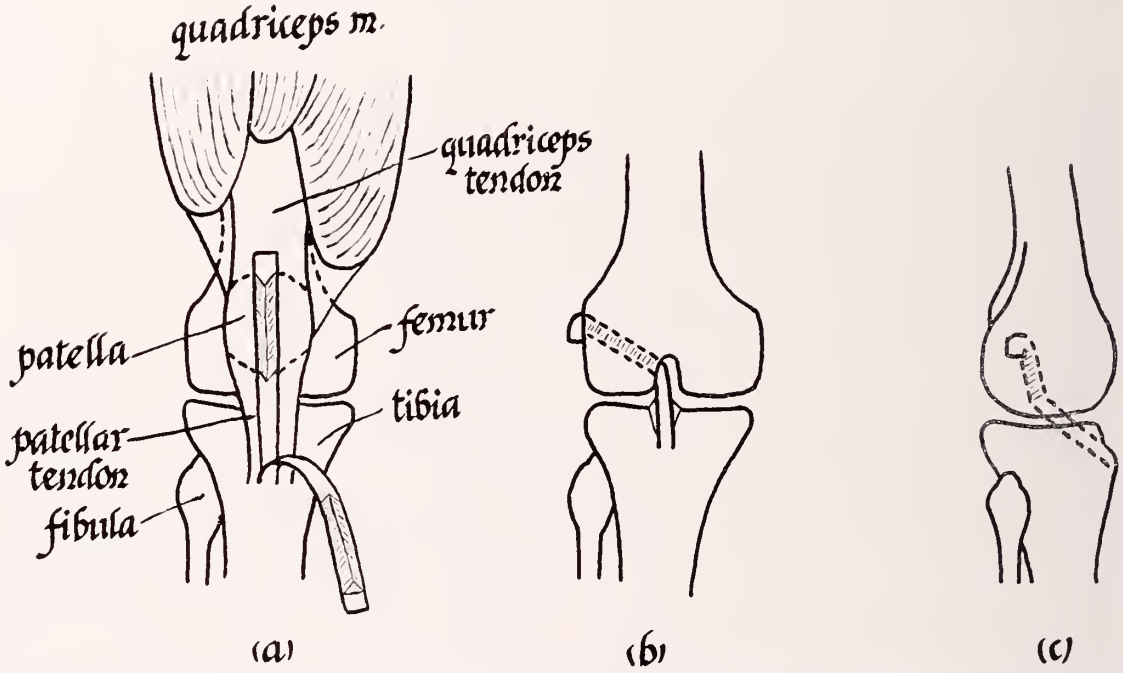

Figure 1: (a) Patellar tendon-patella-quadriceps tendon segment developed as in original Jones; (b) A-P view of reconstructed anterior cruciate ligament (patellar tendon section—new anterior cruciate; patellar section—in lateral femoral condyle tunnel; quadriceps tendon section—sutured to periosteum); and (c) Lateral view of (b).

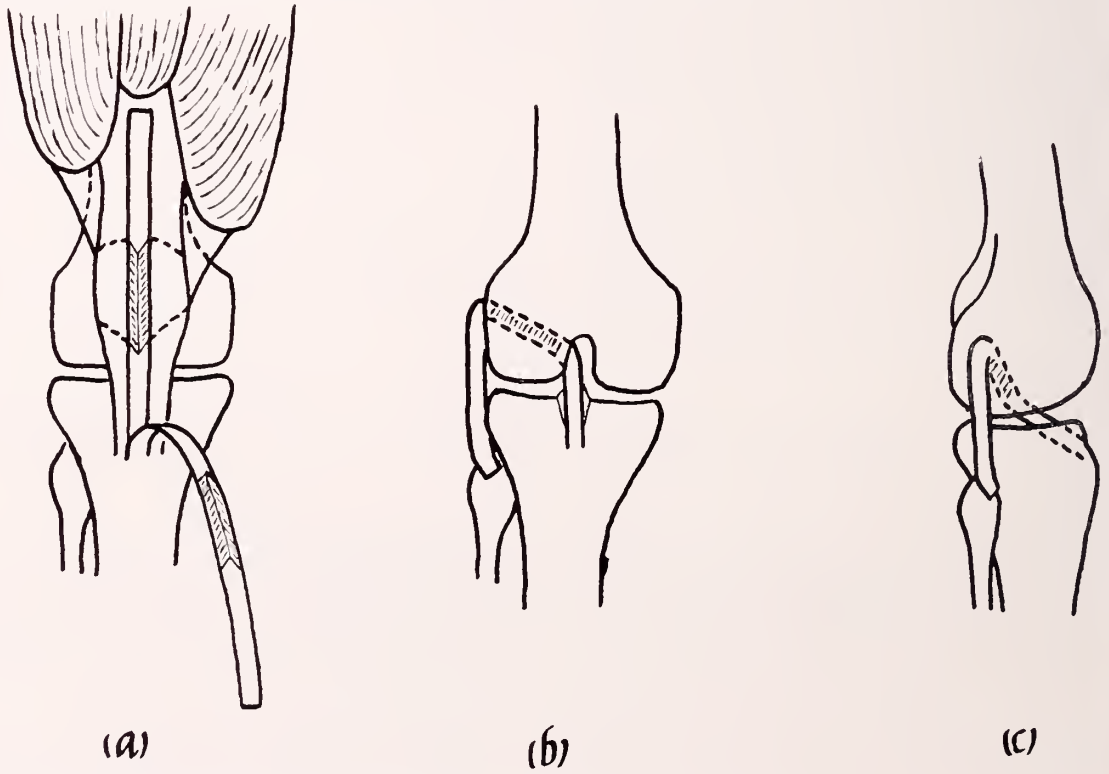

Figure 2: (a) Extension of Jones with longer quadriceps tendon section for reconstruction of lateral collateral ligament; (b) A-P view of extension of Jones showing both ligaments reconstructed; and (c) Lateral view of (b).

Examination revealed a large (6' 3", 200 lb.) healthy appearing male. The left quadriceps was quite strong against resistance, though one-half inch atrophy was found. Knee motion was normal and painless. A moderate effusion was present. There was tenderness to palpation at the joint line laterally and over the femoral attachment of the fibular collateral ligament. The anterior drawer sign was markedly positive, and varus stress revealed complete lateral instability. The McMurray and Apley tests were negative. No neurological deficit was found distally, and routine radiograms were negative.

He was taken to surgery on December 5. Under general anesthesia, testing the knee revealed even greater anterior and lateral instability.

The joint was opened through a liberal medial parapatellar incision. The lateral meniscus had been torn and was completely excised. The anterior cruciate ligament had been avulsed from its tibial attachment, and the remaining ligamentous tissue was inadequate for reattachment.

The extension of the Jones procedure as described was carried out. The patient's postoperative course was uncomplicated.

Four months after surgery his knee was asymptomatic. He was up to 25 pounds on progressive resistance quadriceps exercises and running without difficulty. Examination revealed an excellent quadriceps against resistance, no effusion, and motion from 65 degrees in flexion, to 180 degrees extension. Anterior displacement of the tibia on the femur, with the knee in 90 degrees of flexion, was slightly more pronounced than on the normal right side. No significant lateral instability was demonstrable.

This natural extension of the Jones procedure is recommended rather than performing two separate reconstructions at the same sitting when the combination of chronic anterior and lateral knee instability is encountered.

Addendum

This athlete returned to active competition, playing in ten high school football games without difficulty during the 1970 season. Two more such procedures have since been performed with equally satisfactory results.

References

1. Crenshaw, A. N., (Ed.): Campbell's Operative Orthopaedics, ed. 4, St. Louis, C. V. Mosby Co., 1963.
2. Jones, Kenneth, J.: Reconstruction of the Anterior Cruciate Ligament, J. Bone & Joint Surg. 45-A:925-932, 1963.
3. Kaplan, E. B.: The Iliotibial Tract, J. Bone & Joint Surg. 40-A:817-832 (July) 1958.
4. O'Donoghue, D. H.: Surgical Treatment of Fresh Injuries to the Major Ligaments of the Knee, J. Bone & Joint Surg. 32-A:721, 1950.

Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (not onion skin or flimsy), standard letter sized (8½ by 11 in.) white paper. Wide margins (at least 1¼ in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Authors are requested to submit a carbon copy with the original or retain same in the event the manuscript is lost in transmittal.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for cuts should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it. The author will bear the cost of all over two one-column halftone cuts.

All scientific material apearing in *The Journal* is reviewed by the Editorial Board. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 1031, Charleston, W. Va. 25324.

Special Article

The Alderson-Broaddus College Program For the Physician's Assistant

Hu C. Myers, M. D.

EFFECTIVE education and training for the development of technologists to assist physicians in the diagnosis and treatment of disease has been available to interested students for many years. Until recently most medical educators have felt that assistants should be trained for technical tasks only and that discriminative functions such as history taking and examination of patients should remain the sole prerogative of the doctor.

The unprecedented progress in medicine in recent years, however, has made it almost impossible for the primary physician to keep abreast of all aspects of medical care. Because of this expansion in knowledge, medicine has become increasingly fragmented into specialties and subspecialties. This has largely solved the problem for the specialist, but it has not solved it for those who remain in the branches of medicine concerned with general care. Especially has this been true for the physician in family practice, the internist, the pediatrician, and the general surgeon.

Attempts to relieve the primary physician of his time consuming tasks and not lower the quality of medical service have been made by many people using several methods with varying degrees of success. These have included questionnaires for patients to complete, routine roentgen examinations, multiphasic screening tests, and computerized analysis of symptoms. Each of these has proved to have its merits and each has had its deficiencies.

In the early 1960's some of us began to think of other ways to extend the physician's usefulness. The method which came to mind most prominently was the development of a new type of assistant who could gather facts for the doctor in areas involving major time consuming tasks. At once it was recognized that a change in thinking about the education of physician support personnel would be needed if the desired results were to be accomplished. The education of such a person would need breadth and depth of content if he, like the physician, was to develop the broad comprehensions of man and his environment, the nature of his illnesses and an understanding of the roles of the patient and the doctor in preventing sickness and coping with it when it occurred. Such an assistant, it was felt, would need to be educated to the point that he could assume some of the more routine and time consuming functions of the doctor and yet remain under his supervision and direction. Dr. Eugene Stead[1] of the Duke University Medical Center was the first to start such a program. The Alderson-Broaddus College program,[2-7] also one of the earliest to be developed, differs from his in that the curriculum is integrated with the liberal arts, and on successful completion of the course the student is given a baccalaureate degree.

The Author

- **Hu C. Myers, M. D., Director, Physician's Assistant Program, Alderson-Broaddus College, Philippi, W. Va.**

The first class of students in the physician's assistant program was admitted in September, 1968. At the beginning of this year, the total enrollment in three classes was 80, with 52 male and 28 female, a trend which seems to foretell a male image for this profession. Twenty-eight of the students were veterans. The average age, at the time of admission, was 20⅔ years, ranging from 17 to 34 years. Twenty-two of the students are from West Virginia and the others are from 20 other states from New Hampshire to California, and from Michigan to Louisiana. The largest group from outside West Virginia is 16 from Pennsylvania.

Curriculum Development

In curriculum development the broad objectives were: (1) To give a student cultural subjects which should help him to understand man, his environment and his problems and (2) To equip him with enough knowledge of psychology,

the basic sciences and clinical medicine to enable him to take a competent medical history, do an accurate screening type physical examination and assist a primary physician in many other ways short of final decision making. This was expected to free the physician for a more thorough consideration of the difficult problems which frequently appear, and give him time for an unhurried discussion of the problem with the patient. Also, it was thought that it might give more time for the physician to study, to teach, to do investigative work or to see additional patients.

The Curriculum

Over and above the general education courses not directly related to medicine, the required studies of the curriculum are human anatomy, physiology, biochemistry, microbiology, pharmacology, biomedical physics, pathology, public health, the history, philosophy, and ethics of medicine, history taking, and four consecutive courses in general medicine and surgery which are designed to cover all of the common and the important rare diseases found in this country.

In the last quarter of the first year and in the next seven quarters clinical experiences comprise the laboratory part of all courses if such experience is considered relevant. This gives the students an opportunity to attend staff clinical conferences, take histories, do physical examinations, attend rounds, participate in presentations at grand rounds, assist in the emergency room, cast room, and operating room, etc. The students are given a course in skills such as giving intravenous medications, doing electrocardiograms, pulmonary function studies, urinalyses, blood counts, etc.

Projected Rotations

In the last quarter of their third year and the first two quarters of their senior year the students will be assigned to off-campus clinical experiences in medicine, surgery, an intensive care unit, a group practice type setting, and a physician's office. In addition to the required rotations they will have an elective rotation which they may take in public health, psychiatry, obstetrics, urology, a clinical research unit, pediatrics, or other area which might be arranged and which is approved by the curriculum committee.

Throughout these experiences, clinical medicine and surgery have been and continue to be stressed. No attempt is made to teach the intricacies of laboratory medicine for two major reasons. (1) The preparatory courses for such a role could not be given as a part of the course without extending the time at least a year, and (2) The need for assistants and the chief area in which they can be of maximal service seem to be in the clinical aspects of medicine. This does not mean that the laboratory side is entirely neglected, but it does mean that the course is so constructed that clinical medicine and surgery receive the major emphasis.

In the final quarter of the physician's assistant course the students will be back on campus and their classes will consist of a series of conferences, panel discussions and comprehensive oral and written examinations to determine deficiencies in their knowledge. A seminar devoted to correcting gaps in their knowledge is planned. It will also give time for some of the students to do independent study in fields of their choice.

The textbooks which are used reflect the expectations of the faculty for the type of education which is being provided. The basic science texts are introductory in scope and the clinical texts are those used by many medical schools. For example, *Christopher's Surgery* by Davis and others and *Harrison's Principles of Internal Medicine* by Wintrobe and collaborating authors are the two main clinical textbooks which the students use. The material which is stressed emphasizes etiology, prevention, pathology, symptoms and the physical findings of the various diseases. The laboratory findings and treatments are given in broad outline only, leaving the uncommon tests and the judgmental functions of diagnosis and therapy to the physician.

The faculty for the liberal arts and general education is composed almost entirely of teachers who have completed graduate work, many at the doctorate level. All of the clinical courses are given by physicians, largely diplomates of specialty boards or ones who are working on them. The physicians participating in teaching include three internists, three surgeons, a public health officer, a pathologist, a radiologist, an anesthesiologist, an obstetrician-gynecologist, a neurologist, a pediatrician, a family practitioner, and four surgical residents.

The off-campus rotations are tentatively two veterans hospitals, a Baltimore, Maryland, teaching hospital, two university hospitals including West Virginia University and two other teaching hospitals in West Virginia. We expect to have 12 to 18 physicians giving a four week rotation in their offices to acquaint students with office practice.

As a part of the program, the College initiated efforts to develop a method of certification of physician's assistants in order that they may be

employed legally in West Virginia. A committee composed of members of the West Virginia Nurses Association, the West Virginia Hospital Association, the Medical Licensing Board, the State Board of Nurse Examiners, West Virginia University and Alderson-Broaddus College studied the problems under the guidance of Mr. Nathan Hershey, Professor of Health Law, University of Pittsburgh, nationally known consultant in the legal aspects of the allied health professions. A bill to amend the Medical Practice Act to allow qualified assistants to be used by physicians was introduced into the 1971 session of the State Legislature. This bill, with minor amendments, passed with little opposition. This makes it possible for the West Virginia students, and others from the first class of graduates of the program who may care to, to be employed in West Virginia.

It is believed that this educational endeavor might start a trend which will eventually alleviate some of the pressing problems of the delivery of health care in our state and elsewhere.

Bibliography

1. Stead, E. A.: Conserving Costly Talents—Providing Physicians New Assistants. JAMA 198:1108, 1966.
2. Myers, H. C.: A New Educational Program for the Physician's Assistant. Medical Times 97:3, Page 140 (March) 1969.
3. Ibid.: Annals of the New York Academy of Sciences, Vol. 166, Art. 3, pp. 911-915, Dec. 31, 1969.
4. Ibid.: A Baccalaureate Degree Program for the Physician's Assistant. Appalachia Medicine, June 1969.
5. Ibid.: The Physician's Assistant. West Virginia Medical Journal. Vol. 65, No. 9, Page 303. Sept. 1969.
6. Ibid.: The Physician's Assistant. Group Practice. Vol. 18, No. 8, Aug. 1969.
7. Ibid.: The Emerging Physician's Assistant. Maryland State Medical Journal. Vol. 18, pp. 68-72, Sept. 1970.

To Physicians in Training

To all physicians in training and especially West Virginia residents. West Virginia is in need of physicians in all categories for rural and urban practice. Any physician desiring information concerning openings in the State can communicate with *The Journal. The Journal* will publish free for 6 issues pertinent information concerning any qualified physician who is seeking a location in West Virginia. Single copies of *The Journal* listing practice opportunities will be mailed to physicians upon request.

A roster containing a list of officers of county societies and specialty sections of the West Virginia State Medical Association is available upon request to the headquarters offices. Also, information pertaining to West Virginia licensing laws will be mailed to interested physicians. Interested parties may then write the officers of component societies or sections for further information.

Any other information about West Virginia will be secured from outside sources, if possible, and sent upon request. All letters to *The Journal will* receive individual immediate attention.

Electrocardiogram of the Month

Three to One A-V Block

Edward K. Chung, M. D., and Donald K. Chung, M. D.

Case History

THIS ECG was obtained from a 68-year-old man with coronary heart disease. He was brought to the hospital because of recurrent Adams-Stokes syndrome. Leads II-a and b are continuous.

Discussion

This tracing shows sinus rhythm (atrial rate: 63/minute) with 3:1 A-V block producing a very slow ventricular rate of 21 per minute (Figure 1). Three to one A-V block is a rather unusual A-V ratio and it may be due to three different mechanisms (Figure 2).

The Authors

- **Edward K. Chung, M. D., Professor of Medicine and Director, Electrocardiographic Laboratory, West Virginia University Medical Center, Morgantown; and Donald K. Chung, M. D., Cardiologist, Veterans Administration Hospital, Clarksburg, and Clinical Assistant Professor of Medicine, West Virginia Medical Center, Morgantown.**

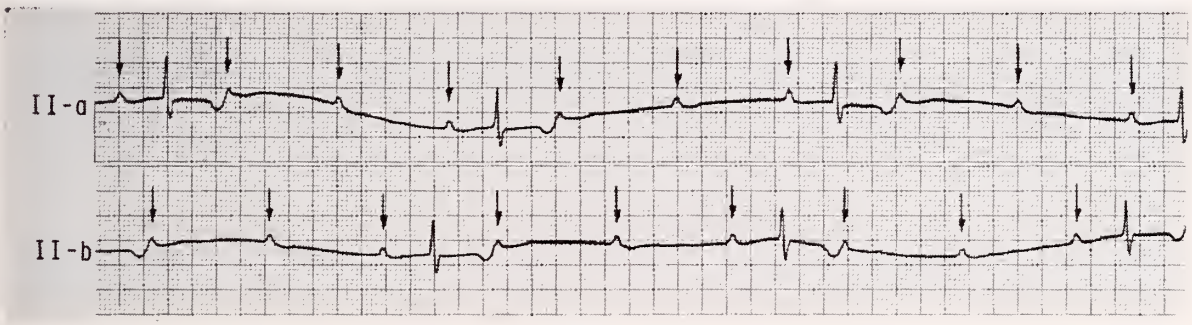

Figure 1

This diagram (Figure 2) illustrates various mechanisms responsible for the production of 3:1 A-V block. (A) 3:2 Wenckebach A-V block followed by an area of 3:1 A-V block. During 3:1 A-V block, two blocked atrial impulses actually penetrate into the A-V junction but fail to reach the ventricles. The first blocked atrial impulse penetrates deeply into the A-V junction so that a new refractory period is created in the A-V junction (concealed A-V conduction). Thus, the subsequent atrial impulse is blocked. From this observation, 3:1 A-V block may be a variant of 3:2 Wenckebach A-V block due to concealed A-V conduction. (B) 3:1 A-V block due to 3:2 Mobitz type II A-V block with concealed A-V conduction. In this case, two successive atrial impulses are blocked but the first atrial impulse penetrates deeply into the A-V junction to create the new refractory period. Thus, subsequent atrial impulses are blocked due to concealed A-V conduction. From this observation, 3:1 A-V block may be a variant of 3:2 Mobitz type-II A-V block. (C) 3:1 A-V block due to two successive blocked atrial impulses with equal penetration into the A-V junction. (A:atria, A-V: A-V junction, V: ventricles). (Reproduced from E. K. Chung, Principles of Cardiac Arrhythmias, Baltimore, Williams and Wilkins Co., 1971).

It is generally agreed that a permanent artificial pacemaker (ventricular) is the treatment of choice for any patient who experienced recurrent episode of Adams-Stokes syndrome due to high degree or complete A-V block.

(See Next Page for Figure 2)

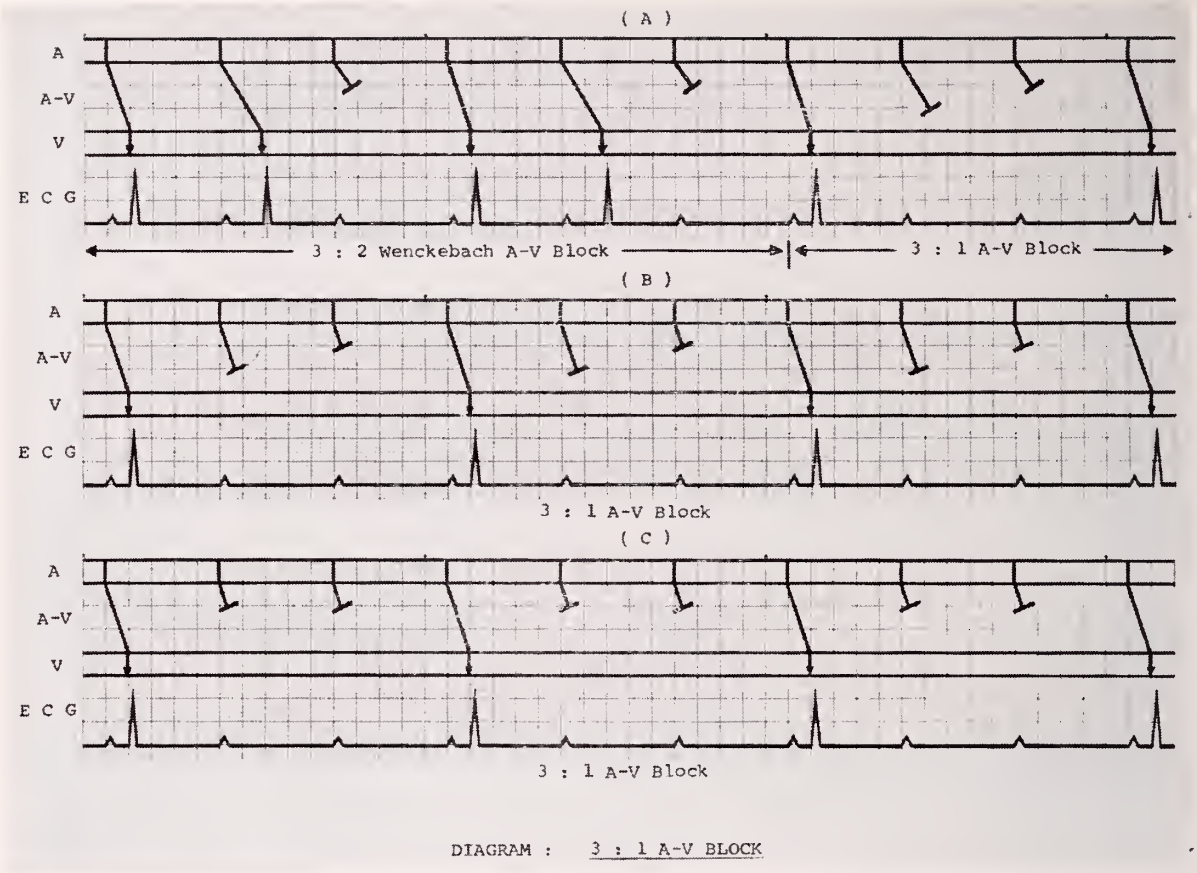

Figure 2

A Four-Letter Word For It

E. M Pooley gave his version of allergy to the readers of the El Paso, Texas Herald-Post:

You get sick nowadays and what you got? Either a virus or an allergy. A virus is what you got when the doctors don't know what you got. An allergy is what you got when the doctors know what you got but don't know where you got it. The other morning I was awakened by a full-fledged case of the hives.

"Must be something you et," says the doc. "You got an allergy." Then the young doc explains it all.

He says that when the pithecanthropus of the eudaemon is in juxtaposition with the translux it makes a hyperthyroid excresence that combines with the whatnot and brings about psoriasis of the membrane and an irritation of the callipygian exodont. In other words, you itch.—*Minnesota Medicine.*

X-Ray Case of the Month

George F. Evans, M. D., Internist, and Walter E. Williamson, Jr., M. D., Surgeon, both of Clarksburg; and Ray A. Harron, M. D., Radiologist, Bridgeport

George F. Evans, M. D.

This 24-year-old male complained of difficulty in swallowing and non-descript pain in the left chest and subscapular area for several weeks duration. He had lost 24 pounds over the previous two to three months due to poor appetite. No symptoms of myasthenia gravis could be elicited.

Ray A. Harron, M. D.

Figure 1, a PA view of the chest, shows enlargement of the mediastinal shadow due to a mass in the left upper portion and to pericardial fluid. There is destruction of the second rib on the left but the lung parenchyma is clear.

Doctor Evans:

The patient was given diuretics, steroids and a low-salt diet, and a repeat film obtained.

Doctor Harron:

The pericardial fluid is gone; the mediastinal mass remains (Figure 3). The lateral view (Figure 3) shows it to be anterior. The rib destruction remains. Differential consideration would be those of a malignant tumor such as lymphoma, particularly Hodgkin's Disease, a malignant thymona or mediastinal teratoma. Lymphoma was favored.

Walter E. Williamson, Jr., M. D.

A left exploratory thoracotomy was performed revealing a large, hard irregular mass involving the entire mediastinum and completely surrounding the left hilar structures. It involved the left pericardium and extended down along the descending aorta. The lesion was not resectable because of its extensive involvement. Multiple biopsies were taken.

Doctor Evans:

A pathological diagnosis of seminomatous tumor of the mediastinum was made. Repeated examination of the testes by several examiners revealed no primary tumor. Radiation therapy was requested.

Doctor Harron:

The patient received 4,000 rads to the mediastinum and to the left rib. Figure 4 shows marked

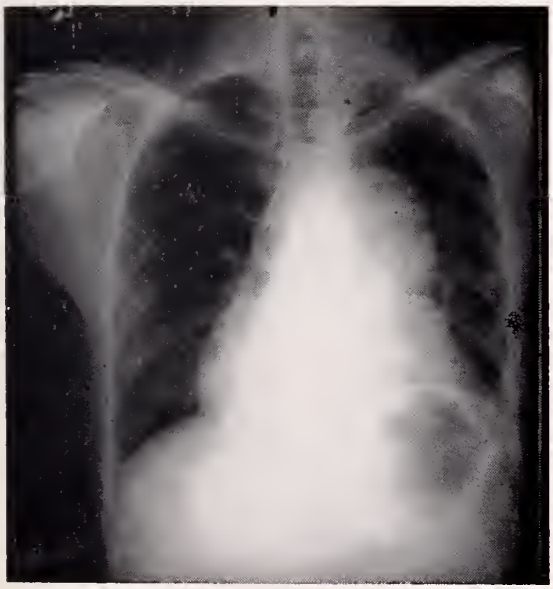

Figure 1

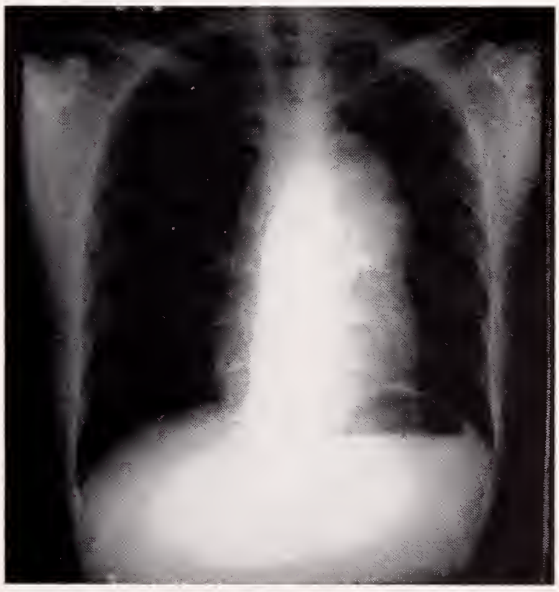

Figure 2

decrease of the primary tumor size and regeneration of the left second rib.

COMMENT:

Mediastinal seminomas are rare tumors. They are probably primary although some observers feel they are metastatic from the testes. Long term survival with bone metastases has been reported following radiation therapy by Bagshaw, McLouglin and Earle, Amer. J. Roentgenology 105:86, 1969.

Figure 3

Figure 4

Atomic Powered Pacemaker

An atomic powered intracardiac pacemaker about the size of a .30 calibre bullet has been successfully tested in laboratory dogs for a year, according to the National Society for Medical Research. Dr. J. William Spickler, a physiologist at the Cox Heart Institute of the Kettering Medical Center in Dayton, Ohio, described the U. S. pacemaker at a recent meeting of the American College of Cardiology.

The new device has been implanted in a dog's heart creating 100 beats per minute ". . . with no complications," said the group. The nuclear battery, for which the new pacemaker is designed, has a projected life of approximately five years. More advanced versions are under study which could power the pacemaker for as long as ten years.

Another report, the Society said, indicates that a ten-year nuclear-powered pacemaker is being tried in humans in France. Doctor Spickler indicated that the French experiments simply replaced a conventional battery with nuclear fuel, whereas the United States design goes one step further by implanting the entire device within the heart.

The Medical Research Society said that French patients are apparently having somewhat special problems. If they wish to travel abroad, they must obtain permission from the atomic energy commission of the country they wish to visit. They didn't speculate on what might happen if a person with an atomic-powered device walked unannounced past weapon detectors now set up at airports.

104th ANNUAL MEETING

of the

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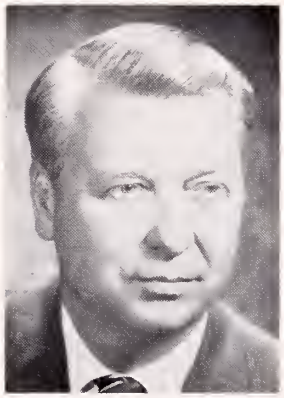
The Greenbrier

AUGUST 19-21, 1971

PLAN NOW TO ATTEND



A message from . . .

The President

CARL HOFFMAN FOR AMA PRESIDENT ELECT

As you all know, the best qualified candidate for President Elect of the American Medical Association is a West Virginian—Dr. Carl Hoffman of Huntington. The campaign committee headed by our senior Delegate, Dr. Frank J. Holroyd, is leaving no stones unturned in trying to obtain the support of the other Delegates to the AMA. All arrangements have been made for our last final effort in Atlantic City in June.

We are confident Doctor Hoffman's chances are excellent, but we must continue our efforts to convince the Delegates that Carl is the best man for American medicine. Each of you has available, through your county medical society, a list of all Delegates to the AMA. In writing Delegates, or friends who might personally talk with Delegates from their states in Carl's behalf, it might be wise to include some of the qualifications of our candidate:

American Board of Urology
President, American Urological Association, 1967-68
Past President, Cabell County Medical Society
Past President, West Virginia State Medical Association, 1957-58
Delegate to the AMA from West Virginia, 1958-69
Member, AMA Board of Trustees, 1969-71
Secretary of the Board of Trustees
Secretary-Treasurer, AMA, 1970-71
Chairman of the Board's Committee on Organization and Operation; and the Professional Liability Committee.

Again I encourage each of you to start writing those letters—to place telephone calls to your friends throughout the country—and to do everything else in your power to bring to West Virginia the honor of having the next President Elect of the AMA.

George R. Callender Jrs.

George R. Callender, Jr., M. D., *President*

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EDITORIALS

THE HIDDEN MENACE

It is perhaps coincidental but none the less interesting that medical costs have risen precipitously during the time when there has been a major propaganda onslaught directed against physicians and the American health care system. It has been easy for some to conclude that the costs account for the criticism. A case can be made, however, for just the opposite cause and effect relationship.

What effect has the derogatory propaganda had on the motivation of physicians to work harder and longer than any other identifiable group one could name today? This motivation is of crucial importance to the adequacy of our present or any proposed medical care system as one can envision by imagining any system functioning with doctors on a 40-hour week, prodded on in their work by motivation equivalent to that in one of our craft unions. One could predict, with some moderation, that under such circumstances three to four times the present number of physicians would be required just to maintain present levels of care.

Part of the reckoning for services rendered between physician and patient has traditionally been the look of gratitude and trust reflected in the patient's eyes and attitude at the termination of an illness. The patient public has in some measure been induced to no longer trust the doctor and patients less frequently look with gratitude at him. Doctors recognize this and feel that they are being under-compensated for their efforts. Doctors know they work too long and too hard, and if their labors go unnoticed and unappreciated, they will be paid in other kind.

On the doctors' part the patient is now frequently seen as unfriendly, ungrateful, unsympathetic, overly-demanding and potentially litigenous. To some extent a paranoid atmosphere already overhangs the doctor and his patient. An air of suspicion and mistrust has been implanted within the doctor-patient relationship. Many doctors now feel compelled to practice defensive medicine, and defensive medicine is expensive medicine. There is no way of knowing how many unnecessary hospitalizations, how many extra lab tests and x-rays, how many extra hospital days can be accounted for on this basis.

The motivation of a doctor to practice medicine has indeed been tampered with and damaged. As a result, medical costs have been influenced upward. Patients suffer from the increased costs. Doctors suffer because medicine is not as much fun, not as rewarding as it once was. In their zeal to improve medical care, those who have agitated for change have succeeded in worsening medical care.

Money is a motivating force. It is not the only one. It is not even the most important one. If one's primary purpose in life were to acquire and to accumulate money, he would certainly not practice medicine. There are many other better ways to accomplish this. Doctors do work long and arduously. They do assume frightening responsibilities. They will be recompensed either with respect, approval and dollars or with dollars alone.

Many health care proposals are currently before Congress. There resides in each of them the danger that the motivation to practice medicine could be further impaired. For this to go unrecognized might lead to catastrophic results for the nation's health care. The zealous efforts of medical reformers have a tragic potential.

REGRESSION OF CARDIAC HYPERTROPHY FOLLOWING HYPERTHYROIDISM

In a previous editorial in *The Journal* (January, 1970) we commented upon the mechanism of cardiac hypertrophy during hyperthyroidism. There have been a number of observations throughout the years as to how long hyperthyroidism produced by thyroid substances lasts after the administration of these substances are discontinued. As early as 1920, Hewitt[1] observed that cardiac hyperthrophy disappeared when thyroid administration was stopped. More recently, other workers confirmed Hewitt's observation, although they did not determine the exact time for complete regression.

Recently[2] this problem was studied rather extensively on a large series of rats which had received T_3 (L- 3, 3′ 5 Triiodothyronine), which acts qualitatively like thyroxin, for a period of two weeks. Groups of rats were then sacrificed at five-day intervals and the hearts weighed. The data were subjected to a linear regressional analysis, and it was found that the hearts returned to normal size in 14 days. Beznak et al[3] in 1969, working with a small series of rats and using thyroxin, also reported that cardiac hypertrophy regressed in 14 days.

There is no question but that the administration of thyroid substances produces a true cardiac hypertrophy, that is an increased protein synthesis. Gemmill[4] has shown that the percentage of water in the hypertrophied hearts produced by T_3, is the same as that in control animals.

These studies have a practical importance for it is generally conceded that severe, and even moderately severe, hyperthyroidism produces cardiac hypertrophy; indeed, the heart may enlarge up to a weight of 500 grams. An enlarged heart is, of course, of concern to clinicians, since it nearly always denotes evidence of disease. Although the experiments cited were done on lower animals, regression of cardiac hypertrophy produced by hyperthyroidism in man also usually occurs when the hyperthyroidism is adequately treated. The hypertrophied human heart takes longer to return to normal size, but the important item is that the hypertrophy disappears.

So far as it is known, there are no lasting ill effects on the heart by administration of thyroxin. Beznak et al[3] have stated that cardiac hypertrophy due to hyperthryroidism shows more complete regression than cardiac hypertrophy produced by other methods, such as partial constriction of the aorta or to nutritional edema. These workers point out furthermore that thyroxin presumably does not produce irreversible lesions in the myocardium.

It might be that regression of cardiac hypertrophy not always occurs in man. There are cases, usually in elderly patients, in which enlarged hearts do not respond adequately to treatment of thyrotoxicosis. The explanation may be that other unrecognized diseases, such as mitral stenosis or coronary arteriosclerosis are also present.

1. Hewitt, A. Quart J. Exp. Physiol. 12:347, 1920.
2. Van Liere, E. J. and Sizemore, D. Proceed. Soc. Exp. Biol. & Med. 136:645, 1971.
3. Beznak, M. et al. Canadian J. Physiol. & Pharmacol. 47:579, 1969.
4. Gemmill, C. L. Am. J. Physiol. 195:385, 1958.

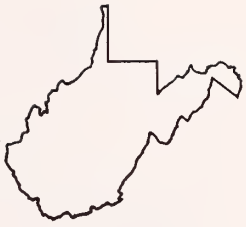
Testing for Deafness

Scientists have found that a new method of testing for deafness in animals may prove itself useful in testing for deafness in human infants. A report by the National Society for Medical Research said that scientists at the National Institute of Dental Research and the Eye Research Foundation have found a way to test for deafness which does not require the patient to cooperate.

Scientists have adapted a lock-in amplifier to measure directly the ability of the animal's ear to convert sound waves into electrical impulses. The amplifier can detect and measure electrical signals of known frequency that are "buried" in high amplitude background noise. The electrical impulses produced in the inner ear mechanism are interpreted by the brain as hearing.

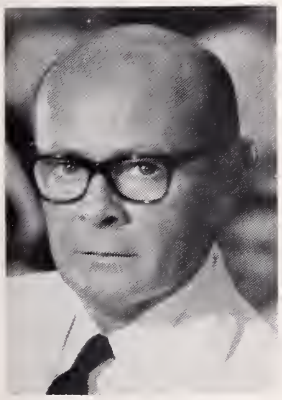
After a pure tone is fed into the ear, the device picks up and measures the impulses made in the ear. If the wave pattern of the ear's electrical signal is the same as that of the sound wave, the subject is not deaf. If the signal is missing, then the animal is deaf. The subject is considered to have impaired hearing when the electrical signal is smaller than normal.

GENERAL NEWS



Dr. Curtis P. Artz To Speak At 104th Annual Meeting

Dr. Curtis P. Artz of Charleston, South Carolina, will be among the honor guests at the 104th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 19-21.



Curtis P. Artz, M. D.

Dr. Clark K. Sleeth of Morgantown, Chairman of the Program Committee, announced that Doctor Artz will serve as Moderator for a "Symposium on Cancer" at the first general scientific session on Thursday morning, August 19.

Doctor Artz has been serving as Professor and Chairman of the Department of Surgery at the Medical University of South Carolina since 1965.

Curtis P. Artz, M. D.

Dr. Curtis P. Artz, a native of Jerome, Ohio, is a familiar figure in West Virginia as he began his medical practice in the State in 1941 in Grantsville, Calhoun County. He remained in Grantsville until 1945 when he entered a surgical residency at the Ohio State University Health Center in Columbus.

Active in the affairs of organized medicine, Doctor Artz served as President of the Parkersburg Academy of Medicine in 1943 and as a member of the Council of the West Virginia State Medical Association, 1944-45.

Doctor Artz received B. A. and M. D. degrees from the Ohio State University School of Medicine, and a M. S. degree in 1951 from Baylor University School of Medicine. He interned at Baltimore City Hospitals, 1939-40, and served a mixed residency at Camden-Clark Memorial Hospital in Parkersburg, 1940-41. He also served residencies at Ohio State University Health Center and the Brooke Army Medical Center in Ft. Sam Houston, Texas.

From 1951 to 1953 he served with the United States Army Surgical Research Units in this country and in Korea.

He then joined the University of Mississippi School of Medicine faculty in 1956 before accepting the position as Shrine Professor of Surgery at the University of Texas Medical Branch in 1963. He has been on the faculty at South Carolina since 1956.

Doctor Artz is a Diplomate of the American Board of Surgery, and a member of the American College of Surgeons and a number of other professional organizations. He is the author of numerous articles which have been published in scientific journals and also the author or co-author of nine books.

AMA President Honor Guest

Dr. Wesley W. Hall of Reno, Nevada, President Elect of the American Medical Association, has accepted an invitation to appear as a guest speaker at the first session of the Association's House of Delegates on Wednesday afternoon, August 18. Doctor Hall will be installed as President of the AMA at the annual convention in June.

It was announced previously that Dr. Jack C. Willke and his wife, Barbara H. Willke, R. N., of Cincinnati will present a program on "The Family Physician's Role in Sex Education" at the second general scientific session on Friday morning, August 20.

Also, Dr. R. R. Hannas, Jr., of Kansas City, Missouri, will present a paper on "Emergency Department: New Field of Practice" at the Friday morning session.

Business Meetings Scheduled

The Pre-Convention Meeting of the Council will be held on Wednesday morning, August 18.

The first session of the House of Delegates will be held on Wednesday afternoon, and the final session on Saturday afternoon, August 21.

Additional details concerning the 104th Annual Meeting at The Greenbrier will be announced in future issues of *The Journal.*

Doctor Klingberg on National Committee

Dr. William G. Klingberg, Professor and Chairman of Pediatrics at the West Virginia University School of Medicine in Morgantown, has been appointed to the Committee on Medical Education of the American Academy of Pediatrics. The Committee is concerned with residency training and continuing education of the practicing physician.

Artificial Implantable Lungs Require More Study

Artificial implantable lungs for humans will not be feasible in the foreseeable future, the National Society for Medical Research believes.

"There are studies underway with laboratory animals which have provided hope for eventual use. In our opinion, however, the problems inherently associated with successful implantation of a lung in a human being will take many additional years of study," the Society said.

One of these problems, it was explained, is related to incompatibility of the surface of the apparatus to surrounding blood. As a result, laboratory animals have not survived long enough to be really encouraging due to the development of blood clots.

Substances containing blood thinning agents are now being considered for coating the artificial lung to reduce this incompatibility, but this may also cause complications such as excessive bleeding.

Another problem has been that the artificial lung compresses the other lung, causing respiratory failure. Advanced designs of the "lung" may eliminate this difficulty.

"There are several other factors, such as a need for new and additional instrumentation connected with the device, which must be perfected before we can approximate a time for human use," said the Society.

In spite of difficulty, the group strongly endorses further animal experimentation toward a workable artificial lung system.

Governor Appoints Physicians To State Board Terms

Before adjournment of the regular 1971 legislative session, the West Virginia Senate confirmed a number of nominations by Gov. Arch A. Moore, Jr., to various state boards and commissions. The list included:

Dr. Joseph A. Smith of Dunbar as a member of the Medical Licensing Board for a term to end June 30, 1975.

Dr. Richard E. Flood of Weirton, West Virginia State Board of Examiners for Licensed Practical Nurses for a term to end June 30, 1975.

Dr. Theodore P. Mantz of Charleston, West Virginia Nursing Home Licensing Board for a term to end June 30, 1976.

Dr. Paul S. Gotses as Superintendent of Fairmont Emergency Hospital, to serve at the will and pleasure of the Governor.

Doctor Sperow New AAOS Fellow

Dr. Clifford Sperow of Martinsburg has been inducted as a Fellow of the American Academy of Orthopedic Surgeons. The honor came at the Academy's recent annual meeting in San Francisco.

Research Pointed To Conquest Of Hereditary Diseases

New means of conquering hereditary diseases through genetic manipulation will be a forerunner in basic medical research during the next decade, according to the National Society for Medical Research.

"The effects of genetic alteration upon such diseases as diabetes, hemophilia, and certain emotional disorders may be under study in sophisticated and promising stages of laboratory animal experimentation by 1980," the Society noted, "which will provide the platform for further advances in the future."

Citing recent studies by Dr. Bernard D. Davis of Harvard, the group pointed to major deterrents to the application of genetic control over such human traits as intelligence, temperament and physical structure that lie in differences between "monogenic" and "polygenic" traits.

Monogenic traits, such as eye color and various hereditary diseases, result from genes which individually exert an all-or-none control over the trait. Polygenic traits depend on multiple genes and thus vary continuously rather than in an all-or-none manner.

"Even should scientists eventually develop the ability to incorporate genes into human germ cells, and thus repair monogenic defects, we would still be far from transferring the large blocs of genes needed to specify highly polygenic behavioral traits," reported Doctor Davis.

Another deterrent is that differences in behavior depend very much on differences in the wiring diagrams of our individual brains, and added genes could not be expected to influence this wiring diagram unless put into the germ cell before development. In contrast, a gene for supplying a missing product, such as insulin, could conceivably be effective whether introduced into a germ cell or into a fully developed individual.

"Education on the distinctions between monogenic and polygenic inheritance is of extreme importance if the public is to distinguish between realistic and wild projections for future developments in genetic control in man," the Society explained.

New Data on Doctor Shortage

Statistics provided by the American Medical Association show that, in 1969, the United States had 134 counties (4.3 per cent of all counties in the nation) without an active, non-federal physician. While those counties contained 8.2 per cent of the nation's land area, they embraced only 0.2 per cent of the population.

This data has given rise to serious questions as to whether the Federal Government can—through any national health proposal—effectively increase the number of health personnel in those sparsely populated areas.

MLB Licenses 20 Physicians To Practice in State

The Medical Licensing Board of West Virginia licensed the following 20 physicians by FLEX examination to practice medicine in the State of West Virginia at a meeting held at The Capitol in Charleston on December 2-4, 1970:

Bonagua, Leo Danao, South Charleston
Couri, Edgard, Holden
Fields, William Russel, Charleston
Kothari, Nikhil Himatlal, Hamilton, Ohio
Kusumi, Yoshitaro, Garner, N. C.

Negrin, Vicente Arnaldo, College Park, Ga.
Ocampo, Luis Horacio, Pennsboro
Raju, S. Gopal, Beckley
Ramanan, Chitraleka, Morgantown
Razon, Benjamin de Mesa, St. Louis, Mo.

Rege, Pramod Raghunath, Charleston
Renedo-Calvo, Jesus, Wheeling
Sales, Avelino Tiuseco, Morgantown
Samuels, Norman, Martinsburg
Serrato, Jose M., Charleston

Tiu, Wilfredo Ang, Wheeling
Vasquez, Carlos Leonel, Weirton
Verma, Purushottam Lal, Charleston
Wong, Elena Chiu, Charleston
Zerrudo, Cenon Degayo, Parkersburg

The Spring meeting of the MLB was held at The Capitol in Charleston on April 12, 1971, for the purpose of licensing physicians by reciprocity and temporary licensure to practice medicine in the State of West Virginia.

Postgraduate Course on Cardiology In Morgantown, Oct. 7-9

The American College of Cardiology and the West Virginia University School of Medicine will sponsor a three-day postgraduate course on "Diagnostic and Therapeutic Approach to Cardiac Arrhythmias" which will be held at the WVU Medical Center, October 7-9.

Dr. Edward K. Chung, Professor of Medicine and Director of the Electrocardiographic Laboratory at WVU, is the program director. He announced that members of the WVU faculty and several physicians from other universities will be members of the faculty.

Enrollment for the course is limited to 50 and advance registration is requested. Registration fee for the course is $75 for members of the American College of Cardiology and $125 for non-members.

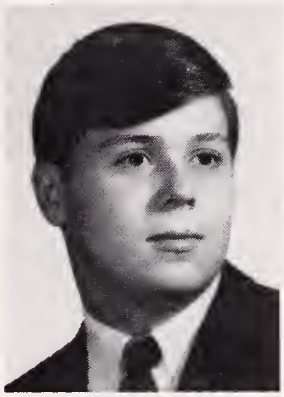
Doctor Frazier Honored

Dr. Claude A. Frazier of Asheville, North Carolina, was recently awarded a plaque for "Outstanding Contribution in the Field of Medicine" by the Tenth District Medical Association of the Medical Society of the State of North Carolina.

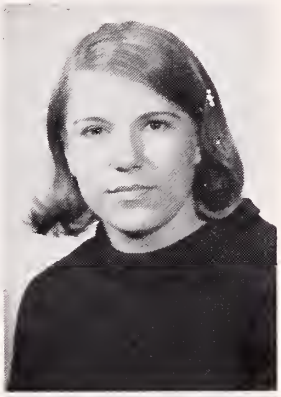
Doctor Frazier's practice is limited to allergy and his father is Dr. Claude Frazier of Huntington.

Two Young Students Awarded Medical Scholarships

Two young West Virginia students have been awarded four-year scholarships to the West Virginia University School of Medicine by the West Virginia State Medical Association.



J. Benjamin Alt



Norma J. Mullins

Dr. Martha Jane Coyner of Harrisville, Chairman of the Association's Committee on Medical Scholarships, said that the recipients of this year's awards will be Norma J. Mullins of Tioga, Nicholas County, and J. Benjamin Alt of Petersburg. They will receive $1,000 apiece for each of their four years at the School of Medicine for a total of $4,000 each.

Both students have been accepted by the School of Medicine to begin studies next fall leading toward M. D. degrees.

Miss Mullins is a native of Clay and is the daughter of Mr. and Mrs. Bernard M. Mullins of Tioga. A graduate of Richwood High School, she received a B.S. degree in zoology in 1970 from Ohio University. She is scheduled to receive a master's degree in biology from WVU this summer.

J. Benjamin Alt is the son of Mrs. Denisa A. Riggleman of Petersburg and the late Berkley S. Alt. He is enrolled at West Virginia University, where he will complete his pre-medical training this spring. He is a graduate of Petersburg High School.

Miss Mullins and Alt are the 23rd and 24th deserving students to receive grants since the State Medical Association started the program in 1958.

The full Medical Scholarships Committee met in Morgantown on Saturday and Sunday, March 27 and 28, to interview applicants for the Association grants.

Other committee members are Drs. Marshall J. Carper and Russel Kessel, both of Charleston; Robert D. Hess of Bridgeport; Thomas J. Holbrook of Huntington; John Mark Moore of Wheeling, and Clark K. Sleeth of Morgantown.

Change of Address

Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. Notices should be mailed to Box 1031, Charleston, West Virginia 25324.

Camp for Diabetic Children July 25 - August 7

After Camp Kno-Koma's 21 years of service to diabetic children of West Virginia, letters are still received from state physicians inquiring whether there is such a camp in our state.

Camp Kno-Koma (No Coma) IS that camp, and its twenty-second annual session will be held from July 25 to August 7.

Youngsters at Camp Kno-Koma, the facility for diabetic children located near Charleston, raise the colors as another day begins during an annual summer program.

Camp Kno-Koma is held at its permanent campsite, Camp Galahad, on Blue Creek in Kanawha County, 40 miles northeast of Charleston. Its program stresses normal camp activities and skills, with a medical staff of doctors, nurses, and a dietician in attendance to see that each diabetic child receives his individual requirements of insulin and diet.

From his daily routine of administering his insulin; checking his urine and recording the test results, and choosing the correct amount of foods according to his diet prescription, each child learns the routine which will give him the best chance to remain well and become a self-reliant adult. Camp Kno-Koma gives the diabetic child the opportunity to "be on his own," away from the ever-protective, and sometimes over-protective, family situation.

After the 1970 session of Camp Kno-Koma, a mother wrote, "Words can't begin to tell you how much it meant for our son, Todd, age 9, to attend Camp Kno-Koma. Todd has been a diabetic since January, 1966. Until this summer, when he attended Camp Kno-Koma, he had never met another child with diabetes. To see 60 boys and girls just like he is did more for him that we can ever tell you. Before he left for camp, he said he would not learn to give his shot, but he wasn't there two days until he was giving it like a pro and has continued to do so since coming home from camp. Life is much easier for all of us now that he has learned, by going to camp, to care for himself so efficiently."

The value of the Camp Kno-Koma program to the diabetic child and his family has been proved to many parents and other citizens. Yet, many eligible children in our state are missing out because they do not know about this camp. They do not know that the policy of the Camp Committee is to make participation available to every diabetic child, age 7 through 15, regardless of financial circumstances. There is no set fee for West Virginia children. Instead, voluntary contributions toward the $80.00 cost are asked from parents. Financial aid is available, if needed.

State physicians are invited to inform their young diabetic patients about Camp Kno-Koma. Further information and application forms may be obtained by writing Camp Kno-Koma, Post Office Box 8184, South Charleston 25303.

Three West Virginia Specialists Named ACC Fellows

Three West Virginia doctors have been granted Fellowships in the American College of Cardiology (ACC), the national medical society for specialists in cardiovascular diseases. The three are among a group of 211 from the United States and Canada recently admitted to the College's highest membership classification.

Edward K. Y. Chung, M.D., Morgantown, the ACC Governor for West Virginia, listed the new Fellows as: Harold Selinger, M.D., Charleston; Robert J. Marshall, M. D., and Thomas J. Tarnay, M. D., both of Morgantown.

The three doctors, as well as the other new Fellows, have fulfilled stringent membership requirements based on several years of practice and specialty certification. This effort, according to Doctor Chung, culminates in their being considered by colleagues in their communities as specialists or consultants in cardiovascular diseases.

Private Health Share Drops

Only 39.5 per cent of all health care costs were covered by direct private payments in the 1969-70 fiscal year, the American Medical Association has reported. Public funds assumed 35.3 per cent of the costs, with insurance and third-party payments covering 25.2 per cent. The portion of personal health care bills consumers had to pay amounted to 67.7 per cent in fiscal 1949-50.

AMA Rural Health Conference Hears Doctor Bornemeier

Mrs. J. N. Jarrett of Oak Hill, Eastern Regional Chairman of Community Health (Rural Health Liaison) of the Woman's Auxiliary to the American Medical Association; and Mrs. B. F. Puckett, also of Oak Hill, State Rural Health Chairman of the West Virginia Auxiliary, attended the 24th Annual AMA Conference on Rural Health March 25-26 at the Marriott Motel in Atlanta, Georgia.

The keynote address, "Partners in Health Care," was delivered by AMA President Walter C. Bornemeier, M. D., at the Conference Banquet. The President expressed his belief that to insure good health care to people in rural as well as urban communities, there must be an increase in medical school graduates; extensive use must be made of allied professionals, especially the nurse, in order to "permit the doctor to do only doctor work;" and we must increase "preventive, diagnostic and treatment care outside the expensive setting of the hospital."

Mrs. R. C. L. Robertson of Houston, Texas, President, Woman's Auxiliary to the AMA, also attended the Conference, and spoke at the Thursday evening, March 25, banquet. She brought greetings from the Auxiliary and said that its members are always ready to support the programs and carry out the projects of the AMA in the delivery of health care.

In addition to the National Rural Health Conference, Mrs. Puckett attended the State Rural Health Conference at Jackson's Mill last October.

Cleveland Clinic To Offer Course in Dermatology

The Cleveland Clinic Educational Foundation will offer a postgraduate course in "Advances in Dermatology" May 12 and 13 in the Bunts Auditorium of its Education Building in Cleveland, Ohio.

A number of guest speakers will join staff members in presenting the program. The registration fee is $60, and additional information may be obtained from Walter J. Zeiter, M. D., Director of Education, Cleveland Clinic Educational Foundation, 2020 East 93rd Street, Cleveland, Ohio 44106.

Congenital Defects Defined In Booklet For Parents

A completely reorganized and updated edition of a booklet entitled "If Your Child Has a Congenital Heart Defect" has been published by the American Heart Association for use by parents of children with operable defects, by organizations for crippled children, and by rehabilitation services.

The publication is intended to prepare parents for events that may follow the preliminary diagnosis, including further diagnostic tests; hospitalization; surgery; convalesence, and the transition to normal living. It features sections on surgery for congenital defects; information on state services for crippled children's services; vocational rehabilitation programs and visiting nurse services, and diagrams which enable physicians to illustrate a child's particular heart defect.

Copies of the 45-page publication may be obtained through local Heart Associations or the AHA Distribution Department, 44 East 23rd Street, New York, New York 10010.

Looking Back 10 Years . . .

A $10,000 check to establish the West Virginia Tuberculosis and Health Association Chair of Pulmonary Diseases at the WVU School of Medicine was presented to University officials during a ceremony in Morgantown on April 8, 1961. Pictured above (left to right) are: Dr. Clark K. Sleeth, Dean of the School of Medicine; Dr. Charles E. Andrews, then Associate Professor of Medicine and occupant of the Chair and now Provost for Health Sciences at WVU; Mr. Hupp E. Otto of Wheeling, then President of the TB Association; Dr. Kenneth E. Penrod, then Vice President of WVU for the Medical Center; Mr. Thomas A. Deveny, Jr., of Charleston, Executive Director of the TB Association; Dr. G. Ralph Maxwell of Morgantown; and Dr. Ralph H. Nestmann of Charleston.

New Association Members

Dr. Bambran A. Adyanthaya, Summers County Hospital, Hinton (Summers). A native of India, Doctor Adyanthaya was graduated in 1957 from the Stanley Medical College in India. He interned at Mt. Sinai Hospital in Baltimore and served a residency at the University of Pennsylvania Hospital. He also had training at Children's Hospital in Philadelphia and at a hospital in England. His specialty is orthopedic surgery.

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Dr. Reza P. Asli, 208 McLain Building, Wheeling (Ohio). A native of Iran, Doctor Asli was graduated in 1962 from the Faculty of Medicine, University of Teheran. He interned at Wheeling Hospital and served residencies at Charleston General Hospital and the WVU Medical Center. His specialty is neurosurgery.

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Dr. Young Choi, 25th and Jefferson Avenue, Pt. Pleasant (Mason). A native of Korea, Doctor Choi was graduated in 1965 from Seoul University School of Medicine. He interned at Western Pennsylvania Hospital in Pittsburgh and served residences at that hospital and Charleston General Hospital. His specialty is general surgery.

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Dr. William J. Echols, 1115 20th Street, Huntington (Cabell). A native of Richwood, Doctor Echols was graduated from West Virginia Wesleyan College and received his M. D. degree in 1964 from the West Virginia University School of Medicine. He interned at the University of Iowa Hospital and served a residency at the Mayo Clinic. He served for two years as a Captain in the Medical Corps of the United States Air Force and his specialty is internal medicine.

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Dr. Gene L. Hackleman, 1009 5th Avenue, Huntington (Cabell). A native of Urbana, Ohio, Doctor Hackleman was graduated from Columbia University and received his M. D. degree in 1945 from the Loma Linda University School of Medicine. He interned at Springfield City Hospital in Springfield, Ohio, and served residencies at the VA Hospital in Louisville and Upstate Medical Center in Syracuse, New York. He served with the Medical Corps of the United States Navy and was formerly located in Silver Springs, Maryland. His specialty is plastic surgery.

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Dr. R. C. Jereza, Box 1029, Beckley (Raleigh). A native of the Philippines, Doctor Jereza was graduated in 1964 from the Far Eastern University. He interned at Rochester General Hospital in Rochester, New York, and served residencies at several hospitals in New Jersey and New York. His specialty is internal medicine.

Dr. Carole Ann Kerr, WVU Medical Center, Morgantown (Monongalia). A native of Morgantown, Doctor Kerr was graduated from West Virginia University and received her M. D. degree in 1967 from the WVU School of Medicine. She interned and served a residency at the WVU Hospital. Her specialty is anesthesiology.

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Dr. Lamberto C. Maramba, 2401 South Kanawha Street, Beckley (Raleigh). A native of the Philippines, Doctor Maramba was graduated in 1962 from the Far Eastern University. He interned at St. Peter's General Hospital in New Brunswick, New Jersey, and served residencies at that hospital and Mt. Sinai Hospital in Miami Beach, Florida. His specialty is internal medicine.

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Dr. Herbert H. Pomerance, Charleston Memorial Hospital, Charleston (Kanawha). A native of New York City, Doctor Pomerance was graduated from New York University and received his M. D. degree in 1941 from the Columbia University College of Physicians and Surgeons. He interned at Memorial Hospital in Wilmington, Delaware, and served residencies at several hospitals in New York City. He served with the Medical Corps of the United States Army, 1942-46. He is Director of the Department of Pediatrics at Charleston Memorial Hospital.

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Dr. Augusto Portillo, 1210 Virginia Street, E., Charleston (Kanawha). A native of Peru, Doctor Portillo was graduated in 1958 from San Marcos University. He interned at St. Elizabeth and Michael Reese hospitals in Chicago, and served residencies at St. Elizabeth and Cook County hospitals in Chicago. His specialty is plastic surgery.

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Dr. Pramod R. Rege, 210 Brooks Street, Charleston (Kanawha). A native of India, Doctor Rege was graduated in 1957 from the B. J. Medical College in India. He interned at General Hospital in Madras and he previously was located in Ottawa, Canada. His specialty is urology.

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Dr. Delfin V. Simbra, Jr., 158 High Street, Morgantown (Monongalia). A native of the Philippines, Doctor Simbra was graduated from Far Eastern University in 1962. He interned at Easton Hospital in Easton, Pennsylvania, and served residencies at Casualty Hospital in Washington, D. C., and Vanderbilt University Hospital. His specialty is ophthalmology.

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Dr. Margaret Wells, Route 2, Box 382, Bluefield (Mercer). A native of Patuxent, Maryland, Doctor Wells was graduated from West Virginia University and received her M. D. degree in 1969 from the WVU School of Medicine. She interned at the WVU Hospital.

Failures To Seek Health Care Involve More Than Cost

American Medical Association spokesmen have branded as "ridiculous" an assumption that the high cost of health care prevents many persons, representing nearly all income categories, from seeking needed medical services.

The assumption, according to the AMA, can't be proved because it attempts to guess motives involving why people do not seek care. Many other factors actually can be involved, the AMA has insisted, including ignorance of the need for care; fear of treatment; fear of diagnosis; fear of a disability, and fear of a possible income loss during treatment.

The very poor generally have some source of free care, the AMA has noted, although many of them tend not to use it. The very rich can afford care, but they do not always seek it.

Heart's Functions Explained In Cartoon Booklet

"You and Your Heart," a 16-page cartoon booklet which explains how the heart works and what causes various ailments related to heart attack, has been issued by the American Heart Association for office distribution by physicians.

Intended for children as well as adults, the publication describes ways to help prevent heart attacks, how to recognize the warning signals, and steps to take if an attack occurs.

Produced by Channing L. Bete Company in cooperation with AHA, the booklet may be obtained through local Heart groups or the Association's National Office, 44 East 23rd Street, New York, New York 10010.

History of Resuscitation Shown in Slide Set

To help in training physicians, nurses and ambulance attendants in the uses of cardiopulmonary resuscitation, the American Heart Association has produced a set of slides entitled "History of Resuscitation."

Approved by AHA's Committee on Cardiopulmonary Resuscitation, the slides depict, in chronological order, man's concern for preserving life through various methods of resuscitation from early flagellation to modern methods of rescue breathing. Each slide contains a description of the technique being illustrated.

The set consists of 21 black and white, and four slides in color. It was adapted by AHA from an exhibit at the Museum of Science and Industry in Chicago. The slides may be obtained through local Heart groups or AHA's Distribution Department, 44 East 23rd Street, New York, New York 10010.

Here are additional physicians who participated in a recent Second Postgraduate Seminar in Family Practice at the West Virginia University Medical Center. Talking with Dr. William W. Fleming (left), Chairman and Professor of Pharmacology at the WVU School of Medicine, are, from the left, Drs. James E. Wise of Follansbee, Thomas O. Dickey of McMechen, Ray S. Greco of Weirton and J. M. Brand of Chester.

Dr. Joseph N. Aceto Named Fellow in Radiology

Dr. Joseph N. Aceto of Meadow Estates, Wheeling, has been honored for outstanding work in medicine and for his contribution to radiology by being named a Fellow of his medical association, the American College of Radiology.

Doctor Aceto, affiliated with Ohio Valley General Hospital in Wheeling and a Martins Ferry, Ohio, hospital, was cited at a convocation during the College's 48th annual meeting in St. Louis, Missouri. The ACR is a professional medical society with almost 8,000 member physicians who specialize in the use of x-rays and other radioactive substances for diagnostic and therapeutic purposes.

Doctor Aceto is a 1947 graduate of Jefferson Medical College in Philadelphia, Pennsylvania.

West Virginia Hospitality Suite In Atlantic City

West Virginia physicians and their wives are cordially invited to visit the hospitality suite of the West Virginia State Medical Association during the annual meeting of the American Medical Association in Atlantic City in June.

The suite will be in the Haddon Hall Hotel and the room number will be posted on the bulletin board in the lobby. The suite will be open from 5 to 7 P.M. on Sunday, Monday, Tuesday and Wednesday evenings, June 20-23.

If you plan to attend the AMA Convention, make it a point to drop by the West Virginia suite.

Dr. George R. Callender, Jr., (center) of Charleston, President of The West Virginia State Medical Association, gave an interesting talk on economic and other trends in modern medicine at an April 7 dinner meeting of the Logan County Medical Society in Logan. Wives of society members were guests. Pictured with Doctor Callender are Dr. Juan A. Nordelo (left) of Man, President of the Logan Society; and Dr. Kermit C. Ericsson, also of Man, the Secretary.

Multi-Problem Family Subject For Charlottesville Course

"The Multi-Problem Family," a one-day continuing education course sponsored by the University of Virginia School of Medicine's Department of Psychiatry, is scheduled for June 25 at the Boar's Head Inn at Charlottesville.

The course, expected to be approved for American Academy of General Practice credit, will deal with why some families produce so many patients and problems.

Further information can be obtained from W. D. Buxton, M.D., Department of Psychiatry, University of Virginia School of Medicine, Box 190, Charlottesville, Virginia.

Dr. Albert C. Esposito of Huntington displays a plaque representing the year's "Outstanding Ophthalmologist" award by the Section of Ophthalmology of the Southern Medical Association. Doctor Esposito, current President of SMA, is only the second non-chairman of a department of ophthalmology of a medical school to receive this honor. The Huntington physician is a Past President of the West Virginia State Medical Association, and is an Alternate Delegate of the association to the American Medical Association.

Medical Meetings

The following is a partial list of national, state and district medical meetings scheduled in the coming months.

1971

May 1-5—Am. Psy. Assn., Washington.
May 3-7—Am. Col. of Ob. & Gyn., San Francisco.
May 10-14—Ohio Medical, Columbus.
May 16-19—Am. Thoracic Soc., Los Angeles.
May 16-20—Am. Derm. Assn., Sky Top, Pa.
May 16-20—Am. Urol. Assn., Chicago.

June 17-18—Am. Rheumatism Assn., New York.
June 20-24—AMA, Atlantic City.
June 22-23—Am. Diabetes Assn., San Francisco.

Aug. 19-21—104th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Aug. 23-26—Am. Hosp. Assn., Chicago.

Sept. 9-11—Am. Assn. of Ob.-Gyn., Hot Springs, Va.
Sept. 13-17—Int. Conf. on Coal Workers Pneumoconiosis, New York City.
Sept. 17-18—W. Va. Heart Assn., Clarksburg.
Sept. 20-24—Am. Acad. of Oph. and Otol., Las Vegas.
Sept. 21-23—Ky. Medical, Louisville.
Sept. 23—Rural Health Conference, Jackson's Mill.

Oct. 1-8—AAGP, Miami Beach.
Oct. 3-7—Pa. Medical, Pittsburgh.
Oct. 11-14—Ind. Medical, Indianapolis.
Oct. 14-17—Va. Medical, Arlington.
Oct. 16-21—Am. Acad. of Ped., Chicago.
Oct. 16-20—Am. Soc. of Anes., Atlanta.
Oct. 18-22—ACS, Atlantic City.
Oct. 24-28—Am. Col. of Chest Phys., Philadelphia.

Nov. 3-6—Am. Soc. of Cyt., Washington.
Nov. 9-16—Am. Heart Assn., Anaheim, Calif.
Nov. 28-Dec. 1—AMA Clinical, New Orleans.

Dec. 4-9—Am. Acad. of Derm., Chicago.
Dec. 5-7—Am. Acad. of Hema., San Francisco.

1972

Jan. 24-26—Soc. of Thoracic Surg., San Francisco.

Feb. 4-12—Am. Soc. of Clin. Path. & Col. of Am. Path., Atlanta.

March 1-5—Am. Col. of Cardiology, Chicago.
March 2-4—Central Surg. Assn., Chicago.
March 6-7—Int. Acad. of Path., Chicago.
March 27-30—Southeastern Surg. Cong., Washington.

April 3-8—Am. Col. of Rad., Bal Harbour, Fla.
April 13-18—Am. Derm. Assn., Dorado Beach, P. R.
April 16-20—Am. Assn. of Neu. Surg., Boston.
April 16-21—ACP, Atlantic City.
April 17-20—Am. Col. of Ob. & Gyn., Chicago.
April 24-29—Am. Acad. of Neurology, St. Louis.
April 26-29—Am. Ped. Soc., Atlantic City.

May 1-3—Am. Assn. for Thoracic Surgery, Los Angeles.
May 1-5—Am. Psy. Assn., Washington.
May 3-5—Maryland Medical, Baltimore.
May 6—Am. Col. of Psy., Dallas.
May 8-12—Ohio Medical, Cincinnati.
May 18-20—Am. Gyn. Soc., Hot Springs, Va.
May 21-24—Am. Thoracic Soc., Kansas City.
May 22-25—Am. Urol. Assn., Washington.

The West Virginia Medical Journal

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Malignant Mesothelioma

Muthugounder Venugopal, M. D.; Robert L. Leadbetter, M. D.; Bobby Lee Caldwell, M. D., and James Boggs, M. D.

The term, "mesothelioma," embraces tumors arising from serosal linings of peritoneal, pleural, pericardial and tunica vaginalis cavities.[5, 17]

It was Maximow who first noted the transition of benign mesothelial cells into fibroblasts. Stout and Murray[1] and subsequently Sano and Weiss[2] demonstrated by use of tissue culture that mesotheliomas have produced elements identifiable individually as mesothelial cells. Actual transition between non-neoplastic mesothelium and tumor cells have been observed. Peritoneal cells, like synovial cells, secrete the acid polysaccharide, hyaluronic acid.[3, 4, 7] This substance which has been identified in mesotheliomas, helps to distinguish them from tumors of visceral origin which commonly secrete a mucinous substance discernible by use of mucicarmine staining.

Case Report

The case reported in this paper illustrates both clinically and pathologically many of the distinctive and characteristic features of this bizarre growth. As such, it is an ideal one for reporting.

A 61-year-old white male was first admitted to Memorial Hospital, Charleston, West Virginia, on October 14, 1961. His complaints included indigestion, belching, abdominal fullness and lower abdominal cramping of six weeks' duration. The symptoms were progressive and were accentuated by eating. Bowel habits were normal, and no weight loss had been noted.

On physical examination, the significant finding was limited to the abdomen, which was moderately distended and tympanitic. Bowel sounds were normal. A fluid wave and flank dullness, indicative of ascites, were demonstrable. Although a slight icteric tint was present, no organomegaly was noted. Rectal examination was negative.

The Authors

- **Muthugounder Venugopal, M. D., Assistant Surgical Resident; Robert L. Leadbetter, M. D., Department of Surgery; Bobby Lee Caldwell, M. D., Department of Pathology, and James Boggs, M. D., Department of Surgery, all of Memorial Hospital, Charleston.**

The laboratory studies were within normal limits. The chest x-ray revealed small infiltrations in both lung bases, with elevation of the right diaphragm. X-ray examination of esophagus, stomach, duodenum, small bowel and gallbladder was normal, with the barium passing readily through the GI tract. Barium enema was also reported as normal.

The day after admission the white cell count rose to 15,750, with a moderate left shift. Stool for occult blood was slightly positive. An abdominal paracentesis on October 20 failed to show any bacterial growth but had a total protein level of 4,400 mg. per cent.

On October 24, 1961, an exploratory laparotomy was performed. Upon opening the peritoneal cavity, a large amount of milky fluid was present. The omentum was markedly thickened and edematous, with numerous small white nodules adherent to its surface. A necrotic-appearing fibrinous exudate was present in both lumbar gutters and in the pelvis. Approximately three to four feet of terminal ileum was bound down in the pelvis by the fibrinous adhesions. The walls of this portion of the ileum were markedly thickened. Careful examination of the stomach, liver, spleen, kidneys, pancreas and large bowel revealed no significant abnormality.

Frozen section on a portion of omentum was reported as inflammatory involvement with no evidence of carcinoma. Additional omentum was excised for permanent sections, prior to closure.

On permanent H and E sections of the omentum, the pathologist reported large tumor cells containing acidophilic amorphous cytoplasm with centrally located large, vesicular nuclei and with prominent nucleoli. Occasional mitoses were noted. In some areas, the tumor formed a papillary pattern and in others, poorly defined glands. Mucicarmine strains revealed no positive mucin-producing areas.

It was felt initially that this represented a poorly differentiated carcinoma, metastatic to the omentum. The possibility of a primary mesothelioma also was noted.

The postoperative course was uneventful and, on the 10th postoperative day, colloidal chromic phosphate was instilled into the peritoneal cavity without sequelae.

In June, 1962, eight months after his original surgery, the patient underwent a second exploratory laparotomy at the Memorial Hospital of New York for Cancer and Allied Diseases, with biopsy and closure.

In October, 1962, one year after his original surgery, he was readmitted to Memorial Hospital, Charleston, West Virginia, in a terminal state. He exhibited marked weight loss and generalized debilitation. He also had persistent vomiting, abdominal distention, cramping and belching. Bowel movements, however, were normal.

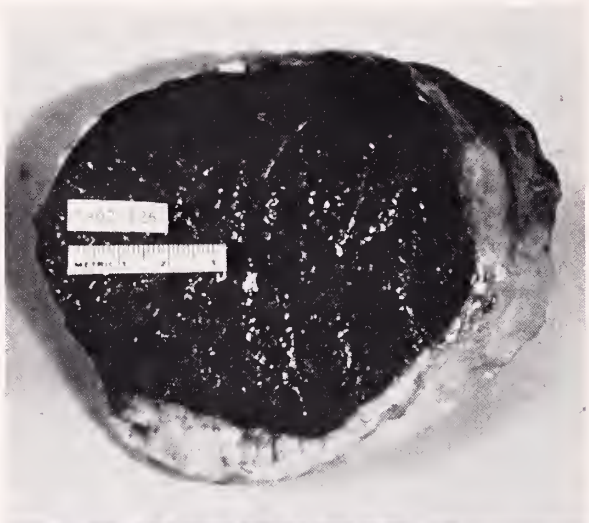
Laboratory studies revealed hemoglobin 9.7 Gm. per cent, hematocrit 28 vol. per cent, and white cell count 3,900 with 73 percent polys, 3 per cent stabs, 22 per cent lymphs and 2 per cent mons. An x-ray of the chest revealed left basilar pneumonia. Flat plate of abdomen was interpreted as normal.

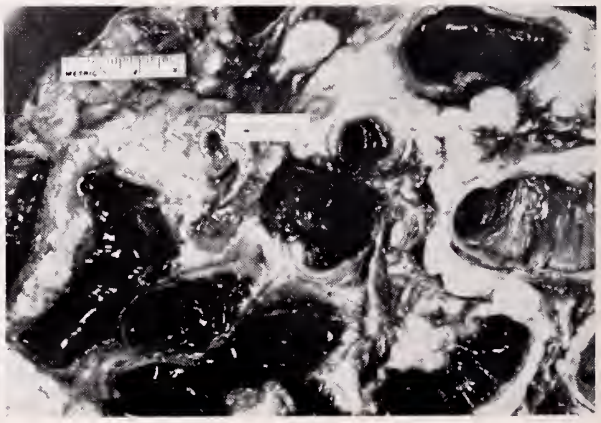
The patient was given supportive therapy. Vomiting was persistent, and he experienced a constant sensation of epigastric fullness in spite of gastric decompression. He expired 14 days after admission which was approximately 13 months after his original diagnosis.

Autopsy Findings

At necropsy the abdominal organs appeared to be encased as one large mass, without an identifiable peritoneal cavity. This necessitated removal of the entire abdominal viscera *en bloc*.

Grossly, the liver, gallbladder, bile ducts, pancreas, spleen, stomach, and small and large intestines were completely encased by a whitish-tan, glistening, homogenous tumor mass measuring up to two cm. in thickness. This gave a very rigid framework to the entire viscera. The loops of bowel were tightly adherent by the serosal tumor islands. An amazingly wide lumen was observed on transverse sectioning throughout the





These illustrations represent the necropsy findings of the transected specimens. The first illustration (that at the left) is a transected portion of the completely encased liver. Encasement of the entire intestinal content by a homogeneous tumor mass is demonstrated in the other illustrations. The rigid neoplastic framework provided an amazingly wide lumen throughout, with no evidence of tumor involvement of mucosa, or of external bowel compression.

specimen, with the individual loops fixed so as not to be distensible at all. Although completely encased within a thick capsule of tumor, there was no evidence of tumor involvement of the parenchyma of any abdominal organ.

The pleura did not seem to be involved grossly. Microscopic sections, however, revealed several definite areas of tumor involvement similar to that within the peritoneal cavity.

Histologically, the thickened serosal surfaces were composed of large groups of tumor cells with a well organized pattern. Tubular and papillary areas alternated with interlacing fibrous stromal patterns. At no point did the neoplasm extend into the bowel wall to involve the mucosa.

Inasmuch as no primary site was found, it was felt that this represented a primary malignant mesothelioma of a mixed type.

Review of the Literature

The original classification of peritoneal mesotheliomas by Stout[1] has been altered little by Ackerman (Armed Forces Institute of Pathology Fascicle) or Knabe.[18]

Classification

I. Benign
   A. Fibrous-localized or diffuse.
   B. Papillary-localized or diffuse.

II. Malignant
   A. Papillary-localized or diffuse.
   B. Tubular-localized or diffuse.
   C. Undifferentiated-local or diffuse.
   D. Mixed-local or diffuse.

The incidence of malignant mesothelioma varies between .0002 per cent confirmed from consecutive autopsies reported by Bolio-Cicero[3] and .02 per cent of all autopsies reported by Thompson.[5] Males predominate 2:1. The youngest reported age was 13 years, and the oldest 92 years, with an average age of 47 years.

Initial Clinical Manifestations

(Review of 36 Cases)

Symptoms	*Number of Cases*
Abdominal pain	30
Increase in abdominal volume	23
G. I. Symptoms (nausea, dysphagia, vomiting, diarrhea)	21
Weight loss	7

Signs	*Number of Cases*
Ascites	28
Abdominal mass	13
Ankle edema	6
Intestinal obstruction	6

Both significant weight loss and intestinal obstruction are considered to be late manifestations. Distant metastases are not usually characteristic of mesotheliomas, but lymphatic and rare blood stream extension has been reported.

Distant foci may actually produce the first symptoms, an example being pleural effusion secondary to microscopic pleural implants.[6] Typically, however, extension of the lesion is by rapid growth over the serosal surfaces and erosion into the outer layers of visceral organs. The liver presents the highest incidence of visceral organ involvement.

Although the diagnosis of malignant peritoneal mesothelioma is not usually suspected until laparotomy or necropsy, there are several reported peculiarities which may aid in awakening a preoperative suspicion. The signet ring cells within the ascitic fluid are not, in themselves, diagnostic of any tumor. They have been observed, however, in cases of mesothelioma and can be differentiated from mucus-secreting cells by mucicarmine staining.[6] Similary, Anthony,[8] noted a nonspecific elevation of lactic dehydrogenase within a cavity in which malignancy was present, as contrasted to the plasma level in the same patient. Hypoglycemia also has been observed in cases of mesothelioma.[8, 9, 11]

The typical gross description of malignant mesothelioma has been categorized into two types: (1) A large tumor mass with smaller nodules interspersed throughout the parietal and visceral layers; (2) plaque-like thickening of the peritoneum, a so-called "plastic peritonitis." In the terminal evolution of these papillary tumors, the peritoneal cavity is finally obliterated and no additional fluid is secreted. All organs are matted and must be removed en masse.[4]

It remains for the histological sections to be the fundamental means of distinguishing mesotheliomas from other similiarly growing neoplasms, and the basic uniformity of this microdescription is impressive.

By altering the media in tissue cultures, Sano[2] could bring out either the fibrous or the epithelial component at will. This "multi-potentiality" of mesotheliomas has been substantiated by others.[5, 10]

The individual cells are typically quite large with abundant homogenous eosinophilic cytoplasm without inclusions. Mitosis and abnormal cells are rare. No secretory activity is seen within the cytoplasm or in the tubular or gland-like structures. Finally, no psommoma bodies or concentric calcifications have been reported.

Whereas the localized fibrous or spindle-cell type predominate in pleural mesotheliomas, the diffuse epithelial or tubular variety are seen most often within the peritoneal cavity.[1, 6] Grad-

ations between these two basic forms are also seen with relative frequency, i. e., fibro-epithelial types. Stump[10] has observed that these so-called "mixed varieties" do not metastasize or invade locally as quickly as the pure papillary ones.

Various means of therapy have been tried, with poor results. When feasible, surgical extirpation is thought to be the only hope for permanent cure.[8] Generally felt to be radio-resistant, Fose,[12] et al, using radioactive colloidal gold, dramatically reduced the reaccumulation of ascitic fluid in one case. Brief remissions have been reported by others. Of 35 patients, 19 lived only one year or less in Bolio-Cicero's[3] series, with five living longer than two years.

Summary

A case of malignant mesothelioma of the peritoneal cavity is reported and a pertinent review of the literature is made. It is concluded that malignant peritoneal mesothelioma is a distinct disease entity. Although individual cases may present in a variety of clinical and pathological patterns, the basic uniformity of this condition is evident.

References

1. Stout, A. P. & Murray, M. R.: Localized Pleural Mesothelioma. Investigation of its Characteristics and Histogenesis by Method of Tissue Culture, Arch. Path. 34:951-964, 1942.
2. Sano, M. E., Weiss, E. & Gault, E. S.: Pleural Mesothelioma: Further Evidence of Its Histogenesis, J. Thoracic Surg. 19:783-788, 1950.
3. Bolio-Cicero, A., Aguirre, J. & Perez-Tamayo, R.: Malignant Peritoneal Mesothelioma, Am. J. Clin. Path. 36:417, 1961.
4. Ackerman, L. V.: Tumors of the Retroperiteneum, Mesentery and Peritoneum.
5. Thompson, P. M.: Peritoneal Mesothelioma, Am. J. Surg. 90:1007-1012, 1955.
6. Yoon, Ill Lyong: Malignant Mesothelioma of the Peritoneum, JAMA 181:1107-1110, 1962.
7. Godwin, M. C.: Diffuse Mesothelioma: Relation to Localized Fibrous Mesothelioma, Cancer 10:298 319, 1957.
8. Anthony, C. W. & Welch, N. L.: Malignant Mesothelioma, Rocky Mt. M. J. 58:7104 (June) 1961.
9. Nesbitt, K. A., Boswell, J. T., et al: Malignant Mesothelioma Associated With Hypoglycemia, Am. J. Clin. Path. 30:148-157, 1958.
10. Stumpf, H. H.: Diffuse, Mixed-type Mesothelioma of Peritoneum. Case Demonstrating Multipotentiality of Malignant Mesothelial Cell, Cancer 7:142-148, 1954.
11. Trotter, B. B. & Palmer, W. S.: Mesenchymomatous Mesothelioma. Report of Case With Unusual Features, Cancer 12:884, 1959.
12. Rose, R. G., Palmer, J. D. & Laugheed, N. N.: Treatment of Peritoneal Mesothelioma With Radioactive Colloidal Gold, Cancer 8:478-481, 1955.
13. Stout, A. P.: Solitary Fibrous Mesothelioma of the Peritoneum, Cancer 3:820-825, 1950.
14. Stout, A. P.: Mesothelioma of the Pleura and Peritoneum, J. Tennessee M. A. 44:409-411, 1951.
15. Pendergrass, E. P. & Edeiken, J.: Peritoneal Mesothelioma. Case Report, Cancer 7:899-904, 1954.
16. Emson, H. E.: Primary Malignant Mesothelioma of the Peritoneum, Canad. M. A. J. 85:1244-48, 2, (Dec.) 1961.
17. Milroy, Paul, et al: Mesotheliomas of Small Intestine, Brit J. Surg. 52:46-48, 1965.
18. Knabe, A.: Mesothelioma of Peritoneum, Cleveland Clin. Quart. 23:163, 1956.

Pneumonia Vaccine Under Study

A live vaccine which may become an important factor in preventing certain types of pneumonia and bronchitis is under intensive research at the University of North Carolina.

According to a release by the National Society for Medical Research, the new vaccine has been effective in laboratory animal studies against an organism named Mycoplasma pneumoniae. At least half of all pneumonia occurring in adolescence and young adulthood is caused by the organism. They are among the smallest free-living organisms and are distinct from both bacteria and viruses, said Dr. Wallace Clyde, Jr., of the University's School of Medicine. "The infections while rarely fatal are important causes of lost work and school time among civilians and lost duty time in the Armed Forces," he reported.

The Medicine IV Selective Year: A Follow-Up Report

Roland Schmidt, M. D.

THE new selective program for fourth-year medical students has now been in effect for the better part of a year.[1] Many of you have had personal experience with it from having students as junior colleagues on your services. A general followup report may be of interest.

The Author

- **Roland Schmidt, M. D., Associate Professor of Pediatrics and Acting Assistant Dean for Curriculum, West Virginia University School of Medicine, Morgantown.**

Description of the Medicine IV Program

The West Virginia medical student may now take his final year of training in any or all of the following locations:

(1) West Virginia University Medical Center.

(2) Elsewhere in West Virginia: in hospital-based programs available through the Joint Council on Teaching Hospitals, and in certain approved non-hospital-based programs.

(3) Out-of-state experience is permissible if taken at a university or university-affiliated hospital. This can be anywhere in the United States, or even abroad.

The selective fourth year is divided into 12 four-week blocks. Six are to be spent intramurally at the Medical Center. As certain selectives have insufficient openings at the Medical Center, time spent on such selectives (half a dozen this year) is tallied as intramural even though taken extramurally in West Virginia or even out of state.

Joint Council hospitals participating in the extramural program have remained unchanged over the past year. They are:

Appalachian Regional Hospital—Beckley
Broaddus Hospital—Philippi
Cabell-Huntington Hospital—Huntington
Charleston General—Charleston
Charleston Memorial—Charleston
Chesapeake and Ohio—Huntington
Ohio Valley General—Wheeling
St. Mary's—Huntington
Herbert J. Thomas Memorial—Charleston
Veterans Administration Hospital—Clarksburg
Wheeling Hospital—Wheeling

The scope of the extramural program may surprise physicians who have had no direct relationship with the program. Selectives offered extramurally, number of hospitals offering them, and maximum number of students who can be accommodated are shown in Table 1. The 11 participating hospitals can on paper accommodate 109 students extramurally at any given time. Though the system might be strained if 109 students were to participate simultaneously, Table 1 nonetheless shows surprising capacity for teaching inherent in the Joint Council organization.

Goals of the Program

Though there are many implications, ramifications and side benefits, it is probably fair to say that the program has two main goals. One is to make it possible for the student to lay a better groundwork for his personal career in medicine. The other is to make available a broader medical

Table 1

Medicine IV Extramural Selectives 1971-1972

Selectives Offered	*Hospitals Offering*	*Maximum Students*
Anesthesiology	1	2
Emergency Room	6	9
Family Practice	2	3
Internal Medicine	9	16
Nucl. Med & Endoc.	1	2
Rehabilitation	1	1
Hematology	1	2
Infectious Diseases	1	1
Gastroenterology	1	1
Cardiology	1	1
Coronary Care	1	1
Neurology	1	1
Obstetrics & Gynecology	5	8
Pathology	5	8
Pediatrics	4	9
Psychiatry	2	6
Radiology	7	12
General Surgery	5	13
Neurosurgery	1	1
Orthopedics	5	8
Urology	3	4
		109

education, through the large selection of extramural opportunities, and to provide greater contact between doctors, hospitals and communities in the State with WVU medical students.

The selective fourth year allows students to spend time in medical areas that they think may particularly interest them. If they come to interpret their interests differently as the year moves along, they are allowed unlimited change of selectives, provided courteous notice is given (four weeks are now required for both intramural and extramural change). Many students in the present fourth-year class have come to a comfortable career decision in the course of the year, aided by this flexibility.

As students are now able, in a number of fields, to enter residency training immediately after receiving M. D. degrees, and the internship will soon be waived in other areas, the new fourth-year program was clearly introduced at an opportune time.

How Successful?

Though it's too early to say, there are two indicators that give a promising reading:

(1) Of a 1971 graduating class of 66, 40 have applied for internship to West Virginia University Hospital or a community hospital in West Virginia. Applications far exceed those from any previous graduating class. It seems reasonable to attribute this increase to student endorsement of the new program.

(2) In this first year of the program, 46 students are spending 157 four-week blocks of time working in community hospitals in West Virginia. For next year, 43 have indicated that they plan to take 190 blocks in community hospitals in-state. This indicates continued strong student interest in the extramural program.

Reference

1. Schmidt, Roland: Curricular Changes at West Virginia University School of Medicine. West Virginia Med. J. 66:221, 1970.

WVU Curriculum 1971

Russell V. McDowell, Medicine IV and President of the Class

The curriculum changes which have occurred at WVU School of Medicine during the clinical years, while still in the first transition year, have been an unqualified success. We have been indeed fortunate to have had educators with an eye to the future and the ability to bring about some sorely needed alterations in the continually changing field of medical school curriculum.

The "core curriculum" now compacts the basic clinical services into the third year of training in medical school. The fourth year is now entirely elective within certain limits—and adds the option of spending several months away from the Medical Center in Morgantown, either within the State or at teaching institutions outside West Virginia and even the United States. The benefits of such exposure are obvious and have been realized during this pilot year.

WVU is in essence one of the forerunners of a national trend to permit medical students to have more opportunity to see where and how they will spend their future in medicine. While attending the 1970 Southern Medical Convention in Dallas, Texas, I was able to compare our program with those of several other medical schools from the student's point of view. It should not be surprising that students have the same gripes, fears, aspirations and criticisms of curriculum. The students were unanimous in their reaction to our program—either they are already in a similar program, are going to such a program, or wished that they were. One evening of the convention was devoted to a panel discussion concerning medical education and curriculum. The physicians who participated were by and large faculty members at various Southern medical schools. The result of the panel discussion confirmed that medical education must be (1) flexible and (2) responsive to student desires if it is to be relevant, especially after the "so-called" basic science years. Even the most conservative physicians and educators realize that changes are necessary if medical education is to keep pace with the needs of the medical profession to provide adequate health care.

The advantages of our present curriculum are too numerous to adequately even summarize in this article, but I would like to mention three important changes which have occurred.

(1) *Flexibility*—To be able to experiment in certain academic areas without making a permanent and incorrect decision at a too early date. To be able to pursue a specialty track, general track or research track during the fourth year.

(2) *Exposure*—To other teaching facilities, both university and community, which the student needs in helping to make intelligent future decisions.

(3) *Student Attitudes* — Probably best summed up by a conversation which I heard between a faculty member and a fourth-year student. The question was asked, "Why is it that this year's class doesn't seem as dissatisfied with the curriculum and teaching as has prevailed in the past?" The answer, "I used to have the same gripes but this program is so good I can't think of anything to gripe about anymore."

In short, WVU has taken a giant step forward in meeting the demands of modern medical education, at least from the standpoint of curriculum; and we surely appreciate this Administration's attitude.

Growing Experiences

E. Phillips Polack, Medicine IV

The new M. D. of 1971 will no longer always be a "purebred" of his mother university, but rather some combination of WVU, community or other university hospital. The format of the senior selective program and the student's intramural roles has been previously discussed. I would only hope to present a personal view of additional learning that is available to the senior student on an extramural basis.

Time spent in West Virginia community hospital selectives gives the student a new perspective on medicine as it is practiced. Patients are screened at an office and community hospital level, and the student quickly grows to appreciate the "local" physician who must make such decisions as—Is the patient really sick? If so, can we care for him or must he be sent elsewhere? One quickly finds that patients are competently cared for at a community level requiring relatively few referrals. Those cases that are referred are generally sent by an informed practitioner who may not have the time or facilities to deal with the esoteric diagnostic problem to which the university practitioner is devoted.

In viewing our school from another university setting, one finds that problems which were previously believed to be unique at WVU are indeed present even in "big name" places. The students there complain (just like we do at home) concerning the weakness of one particular department or the "lousy" teaching in another. An overall view of medical education in another institution helped me to more appreciate the instruction that we are getting at WVU. In general, our professors are more available, as informed, and more interested in teaching.

One additional advantage of the extramural university experience is exposure to the different techniques in medicine that do exist far from the borders of West Virginia. Difference need not necessarily mean quality, but exposure to new methods can only contribute to the purpose of the senior selective program—which is designed to be a growing experience toward the ultimate goal of extending competent patient care.

Man in the Middle

Phillip J. Peters, Medicine IV

Other articles in both the present and a previous edition of *The West Virginia Medical Journal*[1] have discussed the structure and intent of the new senior year curriculum at the West Virginia University School of Medicine. It is my intention to discuss the multiplicity of roles in which the senior student finds himself placed during his final year. In my experience I have functioned in three different capacities: "house officer," teacher and student.

A majority of my classmates have at some time during this year taken a sub-internship on a clinical service. This generally involves assuming an intern's duties and responsibilities under supervision. While this is a superb opportunity to learn medicine and to develop some degree of

judgment, it is also a trying experience. The senior student is essentially making the transition that all medical graduates make on July 1st; however, he is doing it a year earlier, without the security of an M. D. degree and knowing it is only a temporary transition of several months' duration. Based on discussions with my classmates and from my own personal experiences, this transition to the role of "house officer" has been both a successful and a beneficial one. It has necessitated a combined effort on the part of staff physicians, nurses and senior medical students, but I believe without question the adjustment to internship will be easier for those trained in the new curriculum.

The second role in which the senior finds himself is that of teacher. I hope the reader won't think it presumptuous of a senior medical student to regard himself as a teacher, but I believe strongly that in medicine a great deal of practical education is gained through exchange among colleagues. The teaching relationship of which I speak is primarily one between the senior and junior student. This may range from demonstrating ward procedures to reading journals and additional sources pertaining to the senior's patients on whom the junior has done a history and physical. It is also not uncommon for a junior to ask a senior to preview a formal presentation intended for a staff man. There are certainly conflicts in the vastly different roles which the seniors and juniors play on the wards but on the whole these conflicts can be minimized or avoided if the senior exercises tact in his dealings with a junior. In fact, a junior frequently finds it easy to approach a senior because he knows the senior has no part in grading or evaluating him.

Having read the above, the reader may ask himself just when and how the senior goes about fulfilling his primary responsibility, that of completing his education to become a physician. I believe that part of the answer to this is that by serving in primary care of patients and by assuming even a minor role in teaching, the senior derives a tremendous educational benefit. I personally followed numerous patients in congestive heart failure or with diabetes when I was a junior student, but it was not until this year when I assumed primary responsibility for them that I began to really understand the pathophysiology and therapeutic rationale involved. By the same token every physician and medical student has sat through long lectures on such abstract principles as Starling curves, etc., but it is not until he makes an attempt to correlate such principles to digitilization or to explain them clinically to a junior or freshman student that the senior truly learns them in the clinical context in which they were intended. The senior has ample opportunity for the more classical forms of medical education on the specialty services he may elect. Here he is free to do in-depth reading in a subject. There is also the advantage of low student/faculty ratios on these services which are directed at small groups at the senior level. The latter points are perhaps the strongest points of the new curriculum.

This article has in no way been able to express all of the varying roles in which a senior may find himself. It is rather an attempt on my part to condense numerous relationships in my personal experience into three general categories amenable to discussion. It must also be remembered that the direction which the senior takes within the program is largely up to him. Some may prefer large blocks of time in the more didactic services while others enjoy services on which primary patient care or teaching is encouraged. Flexibility is by far the key word and the strength of the new senior year.

Reference

1. Schmidt, Roland: Curricular Changes at West Virginia University School of Medicine. West Virginia Med. J. 66:221, 1970.

1970 Student Research Convocation West Virginia University School of Medicine

The Sixth Annual Student Research Convocation took place on April 9, 1970. The first prize, an engraved medallion and a $300 cash award, was established in 1965 to honor Dr. Edward J. Van Liere, Dean Emeritus, for his leadership in bringing the School of Medicine to full stature, his devoted interest to undergraduate students and his many scientific achievements. The second and third prizes were $200 and $100, respectively. Publication of the abstracts in *The West Virginia Medical Journal* constitutes important and much appreciated recognition of the students' efforts.

Margaret J. Albrink, M. D., *Chairman*
Student Research Convocation Committee

Autoradiographic Studies of Protein Turnover In Motorneurons of IDPN-Treated Rats

Robert A. Klein, Medicine II

IDPN (B-B iminodiproprionitrile) is a synthetic compound that, when injected into rats, causes the "waltzing syndrome" permanently. These animals appear hyperkinetic with head twitching, retropulsion, backward somersaulting, and circling. Microscopically, there is a distinct lesion: a swelling of initial segments of spinal motorneuron axons into huge balloons with no discernible alterations in the perikarya. The pathogenic process believed to be responsible for this is a disturbance in exoplasmic flow.

In this study, autoradiography was performed to determine protein turnover in the perikarya of spinal motorneurons and its outflow and accumulation in the induced axonal balloons. Thirteen male white rats with an initial body weight of 125 Gm. were injected intraperitoneally with two or three doses of IDPN, in total three to four mg./Gm. body weight, and killed at intervals from 10 to 52 days. On histological preparation, numerous large axonal balloons averaging 50 u across were observed, and the distance of the proximal axon segment connecting them to the perikarya measured approximately 31 u. One month after administration of IDPN, eight rats were each given one mc. of H^3 -leucine. They were then sacrificed at intervals of 10 minutes, one hour, two hours and seven hours.

Spinal cord sections were prepared and coated with Kodak liquid emulsion NTB-3 and exposed for two to three weeks at 4° C. Silver grains were counted per unit area both in the perikarya and axon balloons. There was a relatively constant protein incorporation into the perikaryon for various time intervals, but in the balloons there was a steady increase of radioactivity with time, indicating accumulation of axoplasmic protein.

Oncogenicity of Schmidt-Ruppin Strain Rous Sarcoma Virus in a Marsupial, (Didelphys Virginiana)

John A. Jupin, Medicine III

The oncogenicity of the Rous Sarcoma virus has been known for some time now. At one time or another it has been used to induce tumor development in representatives of the Amphibia, the Reptilia, the Aves, and the Mammalia. Its ability to induce neoplasia has now been extended to a representative of the Marsupialia. In a colony of approximately 500 opossums observed for four years no spontaneous tumors were noted. When litters of weanling animals were injected with varying amounts of the virus, however, neoplasms developed in a significant number. Of

the five animals receiving the virus intramuscularly, in one a fibrosarcoma developed at the injection site with multiple metastases to the lungs. One of the two animals receiving the virus intracerebrally showed development of a dura-derived fibrosarcoma at the site of injection. In one of the five animals that had subcutaneous injections of the virus a fibrosarcoma developed at the injection site with a solitary kidney metastasis. Homogenates of tumors from the animal with the subcutaneous injection and from the one with the intramuscular injection as well as the original virus were shown to induce tumor in Babcock chickens. It appears that the Schmidt-Ruppin strain of the Rous Sarcoma virus can induce fibrosarcoma in weanling opossums at the site of injection in six to nine months.

Serial Vital Capacity as a Means of Detecting Early Left Ventricular Failure After Acute Myocardial Infarction

James J. Wellman, Medicine IV

Left ventricular failure represents a serious complication of acute myocardial infraction. It has been believed for some time that changes in the vital capacity (VC) constitute one of the simplest and most accurate means of following a patient with congestive heart failure. The objective of this study was to determine the effectiveness of serial VC as a means of detecting reduced pulmonary compliance in patients with a recent myocardial infarction. It has been well documented that a reduced pulmonary compliance is one of the earliest manifestations of pulmonary congestion and, furthermore, there seems to be a direct proportionality between compliance and VC in cardiac patients.

Ten patients who were free from pulmonary disease and who had a proven recent myocardial infarction entered the study. Serial vital capacity was measured directly with a McKesson vitalore at regular three-hour intervals, beginning immediately on arrival in the coronary care unit and continuing for 48 hours. Three determinations were done and the average was plotted on a bedside graph. All patients received whatever therapy was judged indicated by the physicians responsible for their care.

In three of the ten patients, left heart failure was diagnosed by the usual clinical criteria and therapy was initiated. The study indicated that there was a steady decline in each patient's VC several hours before overt signs of failure were recognized. If this experience bears validation in the future, it would appear that the serial measurement of VC may become an extremely useful technique for following the cardiopulmonary status of patients with an acute myocardial infarction.

Attitude Change Among Medical Students: A Preliminary Report On a New Scale

J. David Ruffner, Jr., Medicine IV

The purpose of the research reported here was to assess the validity of a new attitude scale relating to professional attitudes in medical students. Studies of medical student attitudes have generally been disappointing in that usually the attitudes measured had little to do with medicine or the scales used had not been fully developed according to psychometric standards. Medical skills and techniques are always applied by a person, thus filtered through his perceptions, attitudes and values. Likewise, what is known as the art of medical practice is directly related to professional attitudes, so that the development of scales of such attitudes seems to be worthwhile.

This study investigated the merits of one of two scales that had been developed by means of factor analysis in the Psychiatry Department.

The scale consists of 28 items with which students had been asked to agree or disagree on a seven point basis. The alpha coefficient for this scale is *0.74* indicating satisfactory reliability. High scores on this scale represent "professionalism," while low scores represent a "humanistic" outlook. Defined in terms of actual items evaluated, "professionalism" is an authoritarian attitude that "over-values" medicine and what it can do, advocates obedience and conformity to the profession, and views outsiders with suspicion.

The attitude scores of two classes were compared: A *t* Test of the difference between the means was significant (p 0.01).

Senior Class	Mean 77	S.D. 17.6
A Pre-Clinical Class	Mean 92	S.D. 17.0

Students had been asked to give the name of a person in their class: (1) "To whom you talk the most and would be most likely to spend your free time with." (2) "With whom you would like to have a professional association because he would be a very good and reliable doctor." The first question was meant to identify actual social relationships and it was hypothesized that a student would choose someone who had an attitude similar to his own. "Similar" if both chooser and chosen were on the same side of the median score. A Chi Square Test showed that the distribution was significantly (p 0.05 for both classes) in favor of choosing "similar." The second question was more of a popularity contest, and students categorized as "leaders" in terms of the number of choices they received were hypothesized to have scores different from their classmates. A *t* Test of the difference between these means was significant (p 0.01) for both classes.

Senior Class Leaders	Mean 87	Classmates 75
Pre-Clinical Class Leaders	Mean 80	Classmates 93

Induction of Cerebral Magnesium Depletion By Deficient Magnesium Intake or By Ethanol Ingestion In Rats

Linda Ann Long, Medicine IV

Studies in rats have been done (1) to determine the effect of magnesium (Mg.) depletion or chronic ethanol ingestion on cerebral Mg. and (2) to examine the hypothesis that Mg. in bone is mobilized to prevent soft tissue depletion in chronic ethanol ingestion. Twelve 150 g female Holtzman rats were fed a control diet (normal Mg.); ten, a Mg. deficient diet; and ten, the control diet plus 12 per cent ethanol rather than water. Food and fluids were ingested *ad libitum* for seven weeks and the animals then sacrificed. Mg. determinations were performed on cerebrum, cerebellum, heart, muscle, liver and bone tissue.

Soft tissue Mg. in deficient animals was decreased significantly ($p<.05$) below that in controls except for heart and liver. Bone Mg. was 60 per cent that of the control value of 440 mEq./Kg. fat free dry weight. In ethanol fed rats, significant reductions in Mg. levels were found in cerebrum, muscle and heart while bone Mg. concentration was unaltered.

The results demonstrate that in rats, cerebral Mg. is reduced both by a deficient intake of Mg. and chronic ethanol ingestion. Since in ethanol fed rats Mg. concentration in bone was spared in the face of soft tissue depletion, it appears that bone cannot be considered as an active or available source of Mg. The data do not allow a conclusive interpretation of the casual relationship of reduced cerebral Mg. content to the seizure disorders seen both in Mg. deficiency and chronic alcoholism.

Electrocardiogram of the Month

Acute Myocardial Infarction Resulting From 'Steering-Wheel' Injury of the Chest

Donald K. Chung, M. D., and Edward K. Chung, M. D.

A 45-year-old man was brought to the hospital on December 16, 1970, shortly after he was involved in an automobile accident. He denied having any cardiac pain prior to the accident. There was no history of known heart disease, hypertension or diabetes mellitus. On physical examination, there were multiple lacerations on the face and a bruise on the left upper chest wall. X-ray showed multiple fractures including third, fourth and fifth ribs anteriorly on the left. An admission ECG (Figure I-A) revealed an elevation of the ST segments in Leads II, III and aVF with reciprocal S-T segments depression in Leads I, aVL and V_{2-6}. There was also intraventricular conduction defect of right bundle branch block type. Subsequent serial ECG's including Figure I-B taken the following day documented a classic evolution of an acute posterior-diaphragmatic myocardial infarction. Serial serum enzyme determinations are illustrated on Table 1. After a two-week period of a stormy course with various supraventricular as well as life-threatening ventricular tachyarrhythmias, he made progressive improvement and was discharged. He was last seen in March, 1971, and was asymptomatic.

The Authors

- **Donald K. Chung, M. D., Cardiologist, Veterans Administration Hospital, Clarksburg, and Assistant Professor of Medicine, West Virginia University Medical Center, Morgantown; and Edward K. Chung, M. D., Professor of Medicine and Director, Electrocardiographic Laboratory, West Virginia University Medical Center.**

Comments

From the history, this man developed acute myocardial infarction most likely resulting from "steering wheel" injury of the chest. The driver's chest was pinned against the steering wheel when the forward movement of the car was suddenly arrested. Then, the question arises, with its medico-legal implications, whether myocardial infarction was due to the trauma itself, to the additive effects of trauma, or pre-existing latent coronary heart disease.[1] Although these

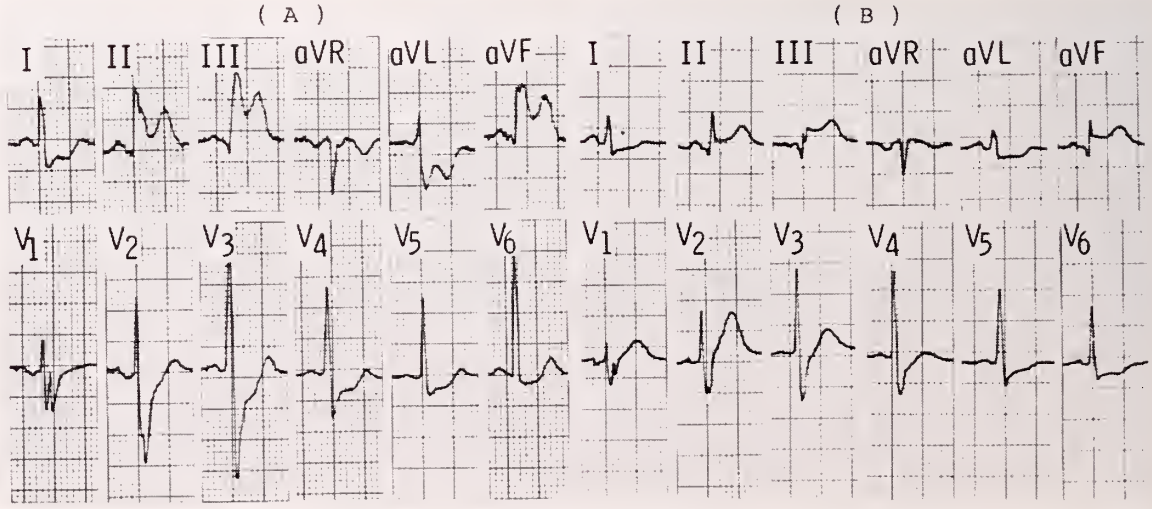


Figure 1

Table 1—Selected Laboratory Data

Date	12/16/70	12/18/70	12/22/70	12/24/70	12/28/70	1/11/71	1/21/71
*SGOT	238	238	106	60	54	60	26
†LDH	1400	2000	1530	1240	760	580	340
WBC	18.600	10.300	13.700	13.000	11.300	9.000	8.700

Normal values
*SGOT—10 to 45 units/ml
†LDH—100 to 350 units/ml

important questions cannot be answered without autopsy study, we are inclined to interpret the development of myocardial infarction due to the trauma. There are case reports in which classical myocardial infarction was documented in a 36-year-old woman[2] and a 13-year-old girl[1] after nonpenetrating cardiac trauma. Both of these patients survived.

There are two atypical aspects of clinical course of myocardial infarction in this patient. Elevation of serum enzymes (SGOT, LDH) lasted for four weeks and serious cardiac arrhythmias persisted over two weeks after the onset of myocardial infarction. This was attributed to contusion of myocardium and other muscles damage in addition to myocardial necrosis.

References

1. Jones, F. L., Jr.: Transmural Myocardial Necrosis After Nonpenetrating Cardiac Trauma. Amer. J. Cardiol. 26:419-422, 1970.
2. Borodkin, H. D., Massey, F. C.: Myocardial Trauma Produced by Nonpentrating Chest Injury. Amer. Heart J. 53:795-801, 1957.

To Physicians in Training

To all physicians in training and especially West Virginia residents. West Virginia is in need of physicians in all categories for rural and urban practice. Any physician desiring information concerning openings in the State can communicate with *The Journal. The Journal* will publish free for 6 issues pertinent information concerning any qualified physician who is seeking a location in West Virginia. Single copies of *The Journal* listing practice opportunities will be mailed to physicians upon request.

A roster containing a list of officers of county societies and specialty sections of the West Virginia State Medical Association is available upon request to the headquarters offices. Also, information pertaining to West Virginia licensing laws will be mailed to interested physicians. Interested parties may then write the officers of component societies or sections for further information.

Any other information about West Virginia will be secured from outside sources, if possible, and sent upon request. All letters to *The Journal will* receive individual immediate attention.

X-Ray Case of the Month

Terry Tallman, M. D., General Practitioner, Fairmont; and
Ray A. Harron, M. D., Radiologist, Bridgeport

TERRY TALLMAN, M. D.

This 24-year-old primip was eight months pregnant when clinical examination was suspicious of twins. Multiple small parts could be palpated and two heart sounds could be detected, but only one head could be palpated. The pregnancy had been normal to date. The patient denied any use of drugs other than vitamins. An x-ray of the abdomen was obtained.

RAY A. HARRON, M. D.

An AP view of the abdomen reveals twins. The presenting fetus shows anencephaly.

DOCTOR TALLMAN:

The patient delivered on her normal E. D. C. The first fetus was male and anencephalic. It lived for approximately one hour. The second fetus was also male, appeared normal and is still doing well several months after delivery. Grossly there was a single placenta. This may indicate monozygous twins, but no microscopic study was done.

104th ANNUAL MEETING

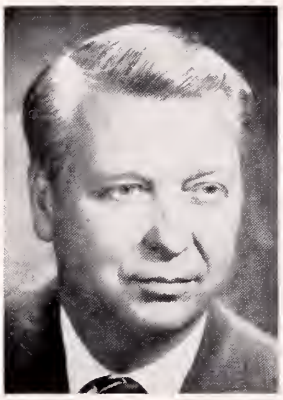
of the

West Virginia State Medical Association

The Greenbrier

AUGUST 19-21, 1971

PLAN NOW TO ATTEND



A message from . . .

The President

OPEN FORUM AT THE GREENBRIER

FINAL arrangements are being made for an exceptional medical educational program at The Greenbrier in August. The first general scientific session on Thursday morning, August 19, will relate to cancer; on Friday morning, the subject matter will include sex education and emergency medical care; and on Saturday morning, the program will be presented by members of the faculty of the West Virginia University School of Medicine. Friday afternoon, of course, will be devoted to meetings of sections and affiliated societies.

An innovation at this year's meeting will be an "Open Forum" which has been scheduled for Thursday afternoon. There will be discussion on the many problems which face the practicing physician under the pressure of federal, state and other third party agencies, and the present public attitude on professional liability. Current material will be presented by members of the delegation to the AMA annual meeting in Atlantic City and others who have attended national meetings on these subjects.

The Open Forum, however, is presented primarily for the purpose of providing time for physicians to voice their opinions on those subjects and participate in the development of the policy of the West Virginia State Medical Association. Such policies thus will guide your elected representatives during negotiations on the state and national levels. The officers of the State Medical Association will benefit from the discussions, and be in a position to better represent you—the providers of medical care in West Virginia—in carrying out one of the most important purposes of this organization.

GEORGE R. CALLENDER, JR., M. D., *President*

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EDITORIALS

DRUGS

The self-defeating nature of the consumerism championed by Ralph Nader and the F.D.A. is well-illustrated by the attitude patients seem to be developing toward drugs. Many are convinced that drugs are addicting, habituating, teratogenic, contaminated and lethally poisonous, as well as over-priced and generally unnecessary. Little or no pharmacologic distinction is made between drugs, and it sometimes seems forgotten that drugs save lives.

A too frequent question heard in doctors' offices is "Will I get hooked on this?" The question in some respects is commendable, demonstrating as it does a proper caution about things taken internally and a respect and concern for the welfare of his own body. It is laudable in that it also expresses an unwillingness to include himself among that pathetic group of instant joy seekers we generally refer to as potheads or junkies. But unfortunately the question probably indicates that this patient is not going to take the medication as prescribed, no matter what reply he gets.

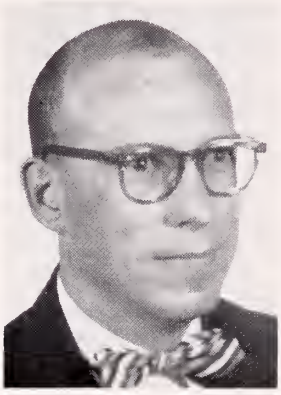
We have no way of estimating the number of patients who end up inadequately treated as a result of misguided concerns such as this. We suspect the number is substantial. A sizeable number, no doubt, end up hospitalized because of "refractory" conditions. We suppose it must have occurred, but we have not heard of any diabetic withdrawing himself from insulin or a cardiac patient from digitalis because he found himself "hooked on dope." We are familiar with instances of psychiatric patients stopping their medication after watching a drug abuse commercial on television and then having to be rehospitalized.

We encourage drug abuse education but we discourage folly. Somewhere it should be said: MEDICINE IS GOOD; DRUGS ARE GOOD; PILLS ARE GOOD; PEOPLE WHO MISUSE GOOD DRUGS ARE BAD.

GENERAL NEWS

Two Additional Speakers Selected For 104th Annual Meeting

The Program Committee has announced that two additional physicians have accepted invitations to participate in a "Symposium on Cancer" which will be held during the 104th Annual Meeting at The Greenbrier in White Sulphur Springs, August 19-21, 1971.



Henry B. Othersen, Jr., M. D.

Paul H. O'Brien, M. D.

Dr. Clark K. Sleeth of Morgantown, the Chairman, announced that the following two members of the faculty at the Medical University of South Carolina will be among the guest speakers: Drs. Henry B. Othersen, Jr., and Paul H. O'Brien. It was previously announced that the Moderator for the Symposium will be Dr. Curtis P. Artz, Professor and Chairman of the Department of Surgery at the Medical University of South Carolina. The Symposium is scheduled for Thursday morning, August 19.

Henry B. Othersen, Jr., M. D.

Dr. Henry B. Othersen, Jr., a native of Charleston, South Carolina, was graduated from the College of Charleston and received his M. D. degree in 1953 from the Medical University of South Carolina. He interned at Philadelphia General Hospital and served residencies at the University of Pennsylvania, Medical University of South Carolina, Children's Hospital in Columbus, Ohio, and Massachusetts General Hospital.

He was appointed Assistant Professor of Surgery at the Medical University of South Carolina in 1965 and was named Associate Professor of Surgery in 1968. He is currently serving as Chairman of the Department of Pediatric Surgery.

He served with the Medical Corps of the United States Navy for two years and is certified by the American Board of Surgery and the American Board of Thoracic Surgery. He is a member of the American College of Surgeons, the American Academy of Pediatrics and the Association for Academic Surgery.

He is a member of the Charleston County Medical Society, South Carolina Medical Association and the American Medical Association.

Paul H. O'Brien, M. D.

Dr. Paul H. O'Brien, Associate Professor of Surgery and Director of the Cancer Clinic at the Medical University of South Carolina, is a native of Evanston, Illinois. He was graduated from Northwestern University and received his M. D. degree in 1954 from Northwestern University Medical School. He interned at Wesley Memorial Hospital in Chicago, and served residencies at Cook County Hospital in Chicago and the Memorial Hospital for Cancer and Allied Diseases in New York City.

He served for two years with the Medical Corps of the United States Army and served on the faculties of the Cornell and Northwestern Medical Schools prior to accepting his present position in South Carolina.

Doctor O'Brien is a Diplomate of the American Board of Surgery and a member of the American College of Surgeons, the Association for Academic Surgery and the Southeastern Surgical Congress.

AMA President Honor Guest

Dr. Wesley W. Hall of Reno, Nevada, President Elect of the American Medical Association, has accepted an invitation to appear as a guest speaker at the first session of the Association's House of Delegates on Wednesday afternoon, August 18. Doctor Hall will be installed as President of the AMA at the annual convention in June.

It was announced previously that Dr. Jack C. Willke and his wife, Barbara H. Willke, R. N., of Cincinnati will present a program on "The Family Physician's Role in Sex Education" at the second general scientific session on Friday morning, August 20.

Also, Dr. R. R. Hannas, Jr., of Kansas City, Missouri, will present a paper on "Emergency Department: New Field of Practice" at the Friday morning session.

Business Meetings Scheduled

The Pre-Convention Meeting of the Council will be held on Wednesday morning, August 18.

The first session of the House of Delegates will be held on Wednesday afternoon, and the final session on Saturday afternoon, August 21.

Additional details concerning the 104th Annual Meeting at The Greenbrier will be announced in future issues of *The Journal.*

Tygart's Valley Medical Society Announces PG Program

The Tygart's Valley Medical Society has invited students in Alderson-Broaddus College's Physician's Assistant Program to participate in its 22nd Annual Post Graduate Session on Thursday, June 17, at Tygart Lake Lodge near Grafton.

The 1:30 P.M. registration for the seminar will follow a forenoon golf tournament at the Tygart Lake Country Club. Dr. Wallace B. Murphy of Grafton will serve as moderator for the afternoon program.

Speakers will include Dr. John Lawler of New York City, Field Representative for the American College of Surgeons, on "The Cancer Registry;" Dr. Donald R. Gilbert of Charleston on "Current Concepts of Urinary Tract Infections," and Dr. Donald C. Carter of Morgantown on "When and How to Use Psychotherapeutic Drugs."

Doctor Gilbert is Chairman of the Department of Urology at Charleston General Hospital. Doctor Carter is Director of Behavioral Medicine and Psychiatric Out-Patient Department at the West Virginia University Medical Center.

Doctor Patrick Gainer, Professor of English at WVU and President of the West Virginia Folklore Society, will speak on "Folk Songs of the Allegheny Mountains" at an evening banquet.

Additional program information may be obtained from Dr. A. Kyle Bush, Secretary, Tygart's Valley Medical Society, The Myers Clinic, Philippi 26416.

Public Health Group Elects Wheeling Dentist

The West Virginia Public Health Association elected Dr. Philip J. Peters, a Wheeling dentist, as its President at its 47th annual conference in Huntington May 6. Doctor Peters succeeds Howard Pyle, a Cabell-Huntington Health Department official.

Other officers elected include Louis Southworth of the West Virginia Department of Mental Health's Division of Alcoholism and Drug Abuse, President Elect; Dr. N. Allen Dyer, Executive Director of the Southern West Virginia Health Council, Vice President, and Mrs. Greta K. Pridemore, Supervisor of the West Virginia State Medical Licensing Board, Treasurer.

AMA Meeting June 20-24 In Atlantic City

The interest of West Virginia physicians attending the 120th Annual Meeting of the American Medical Association June 20-24 in Atlantic City will center on the candidacy of Dr. C. A. (Carl) Hoffman of Huntington for President Elect of the AMA.

Doctor Hoffman currently is the national organization's Secretary-Treasurer; a Trustee, and Chairman of the important Committee on Professional Liability.

The West Virginia State Medical Association again will be represented in the policy-making

C. A. Hoffman, M. D.

House of Delegates by Drs. Richard E. Flood of Weirton and Frank J. Holroyd of Princeton.

Alternate Delegates are Drs. Thomas G. Reed of Charleston and Albert C. Esposito of Huntington.

The meeting's scientific sessions will begin in Convention Hall Monday morning, June 21, after a Sunday evening medicine and religion program, and will end on Thursday, June 24. Scientific and commercial exhibits also will be located in Convention Hall.

Dr. Edmund B. Flink, Chairman and Professor of Medicine at the West Virginia University School of Medicine in Morgantown, will moderate a discussion on diagnostic procedures in endocrinology at 9:30 A.M. on Monday, June 21, in Room G at Convention Hall. He will join with Dr. John E. Jones, also a Professor of Medicine and Chairman of Metabolism and Endocrinology at WVU, in pre-

senting a paper entitled "Procedures for Diagnosis of Thyroid Disorders" on the same program.

Doctor Jones will present an additional paper at 2:00 P.M. on June 21 on "Drugs Interfering with Adrenal Hormonal Evaluation" during a Symposium on the Influence of Drugs in Laboratory Medicine in Convention Hall's Room K.

The House of Delegates will have its opening ceremony at 2:00 P. M. on Sunday, June 20, at the headquarters hotel, Chalfonte-Haddon Hall. Other House sessions are set for 10:00 A. M. on Tuesday, June 22, and 9:00 A. M. on Wednesday and Thursday, June 23 and 24.

The annual elections are scheduled from 7:30 to 9:00 A. M. on Thursday. From 9:30 A. M. until 5:00 P. M. on Monday, June 21, about 10 reference committees will study the many resolutions and reports introduced for the delegates' consideration.

Other program activities will include a 9:00 A. M. Conference on Sunday, June 20, of Presidents and other officers of state medical associations. Heading the West Virginia delegation at that meeting will be Dr. George R. Callender, Jr., of Charleston, President of the State Medical Association.

Details of the AMA program were published in the May 3 issue of *The Journal of the American Medical Association.*

Anesthesiologists Conduct Annual Spring Meeting

The West Virginia Society of Anesthesiologists reelected Dr. William N. Walker, Jr., of Bridgeport as its President at its Annual Spring Meeting on Saturday, April 24, in Morgantown.

Other officers who also were reelected are Dr. David E. Yoho of Glen Dale, Vice President, and Dr. Elbert L. Linger, Clarksburg, Secretary-Treasurer.

Chairman for the annual program was Dr. Herman Turndorf, Professor and Chairman of the Department of Anesthesiology at West Virginia University's School of Medicine. Doctor Walker presided at the meeting, which offered the following speakers:

Dr. Ildefonso Rodis, Instructor, Department of Anesthesiology, at WVU; Peter Schreiber, President of North American Drager Company and Voluntary Assistant Professor, Department of Anesthesia, University of Alabama.

Doctor Turndorf; Dr. Dean Morrow, Professor, Department of Anesthesia, University of Kentucky; Dr. Carole S. Kerr, Assistant Professor, WVU Department of Anesthesiology; and Dr. Bernard Wolfson, Attending Anesthesiologist, Mercy Hospital, and Assistant Clinical Professor, Department of Anesthesia, University of Pittsburgh.

Dr. Allen Yeakel, Professor and Chairman, Department of Anesthesia, at the Milton S. Hershey Medical Center, Pennsylvania State University, was the banquet speaker on Saturday evening, April 24. Doctor Yeakel is a former Professor of Anesthesia at WVU.

Medical Education Conference Brings New Suggestions

The West Virginia State Medical Association's Committee on Medical Education and Hospitals has new assurances that its basic goals and objectives still are sound.

Recommendations evolving from the Second State Medical Education Planning Conference the Committee sponsored in Charleston April 24-25 suggested, however, that some new approaches to those goals might be in order.

P. A. Tuckwiller, M. D.

Daniel Hamaty, M. D.

The Committee was charged several years ago with problem-solving in two major areas: (1) what might be done educationally to get more physicians in the State; and (2) what might be done to coordinate and encourage more effective postgraduate or continuing education.

With formation of the West Virginia Joint Council on Teaching Hospitals, and the new Selective Experience Program which permits medical students at West Virginia University to spend up to half of their fourth and final year in community hospital settings, the scope of the Committee's work has been broadened.

The Planning Conference recommendations included stronger support for, and closer cooperation with, the Joint Council in such specific areas as residency training programs and physician recruitment.

Conference participants endorsed ongoing support for the new Visiting Professor Program at WVU, under which medical faculty members in the different specialties will be available, upon request, to spend varying periods of time with practicing physicians in communities throughout the State.

Still other major recommendations emerging from the Conference called for:

Concerted efforts toward consolidation of clinical programs now provided by various professional, voluntary and other groups with the idea of perhaps three major such meetings a year as a means of (1) making better use of speakers and other program manpower; and (2) better coordinating both education and recruitment efforts.

Strong continued support for the Voluntary Self-Audit Project now being launched by the Medical Association and the West Virginia Regional Medical Program as an additional educational tool available to physicians for use toward the overall goal of better patient care.

The Committee, with Dr. P. A. Tuckwiller and Dr. Daniel Hamaty, both of Charleston, serving as Chairman and Vice Chairman, respectively, has set a meeting for sometime in June to review the Conference and the proposals it brought forth.

In considering what has, and has not, happened since the first such planning conference on November 13, 1966—and current medical education developments in West Virginia as well as across the nation—the April 24-25 meeting offered this lineup of speakers and discussion leaders:

Dr. Frank W. McKee, Dean of the WVU School of Medicine; Dr. C. H. William Ruhe of Chicago, Director of the American Medical Association's Division of Medical Education; LeRoy C. Erickson, Director of Educational Activities for the Pennsylvania Medical Society's Council on Education and Science.

Dr. Thomas H. Covey, Jr., Physician Consultant for the West Virginia Regional Medical Program; Dr. David Z. Morgan, Assistant Dean of the WVU School of Medicine and Chairman of the Joint Council on Teaching Hospitals; Dr. Roland Schmidt, Acting Assistant Dean for Curriculum at the WVU School of Medicine; Doctor Hamaty; Director Charles D. Holland of West Virginia's Regional Medical Program; Dr. Gerald H. Escovitz, Director of RMP activities at the Medical College of Pennsylvania in Philadelphia; and Dr. Charles E. Andrews, Provost for Health Sciences at WVU's Medical Center.

Two State Surgical Groups Elect New Officers

Two of the state's medical organizations elected new officers during annual meetings at The Greenbrier in White Sulphur Springs in late April and early May.

The West Virginia Academy of Ophthalmology and Otolaryngology chose Dr. George V. Hamrick of Charleston as its President at its National Spring Meeting April 14-17. Doctor Hamrick succeeds Dr. Philip M. Sprinkle of Morgantown.

The Academy elected Dr. Jack T. Gocke of Clarksburg as Vice President, and Dr. Nime K. Joseph of Wheeling as a Director. Continuing in office are Dr. J. Elliott Blaydes, Jr., of Bluefield, Secretary-Treasurer; and Drs. Worthy W. McKinney of Beckley and William C. Morgan, Jr., of Charleston, Directors.

The Academy has scheduled its 1972 spring meeting for April 26-29, also at The Greenbrier.

The West Virginia Chapter, American College of Surgeons, elected Dr. David B. Gray of Charleston as its President, to succeed Dr. Herbert G. Dickie of Wheeling, at its April 28-May 1 sessions.

Other new officers include Dr. Alvin L. Watne of Morgantown as Vice President and Dr. James P. Thomas of Bluefield as Secretary-Treasurer. Dr. Joseph R. Lancaster of Morgantown was elected to the Society's Council, and Dr. Theodore P. Mantz of Charleston will continue on the Council to replace the late Dr. E. F. Heiskell, Jr., of Morgantown.

Continuing as the Society's Governor for West Virginia will be Dr. Charles D. Hershey of Wheeling. The surgeons also have scheduled their 1972 meeting, to be held May 3-6, for The Greenbrier.

Here are several of the officers and speakers who played key roles in the National Spring Meeting of the West Virginia Academy of Ophthalmology and Otolaryngology at The Greenbrier in White Sulphur Springs in April. Pictured, from left to right, are Philip M. Sprinkle, M. D., of Morgantown, the Academy President; Carl N. Patterson, M. D., Durham, North Carolina; Cary N. Moon, Jr., M. D., Charlottesville, Virginia; William C. Morgan, Jr., M. D., Charleston, a Director of the West Virginia Academy; Donald A. Shumrick, M. D., Cincinnati, Ohio; William H. Saunders, M. D., Columbus, Ohio, and Richard J. Bellucci, M. D., New York, New York.

New Association Members

Dr. B. A. Alvarado, E. I. DuPont de Nemours Company, Parkersburg (Parkersburg Academy). Doctor Alvarado, a native of the Philippines, was graduated in 1957 from the Manila Central University College of Medicine. He interned at Doctor's Hospital in Washington, D. C., and served residencies at that hospital and the Physicians Memorial Hospital in LaPlata, Maryland. He previously was located at Spencer State Hospital and he is engaged in general practice.

* * * *

Dr. Alberto Angles, 600 East McDonald Avenue, Man (Logan). Doctor Angles, a native of Peru, was graduated in 1957 from the Faculty of Medicine in Lima, Peru. He interned at St. Joseph's Hospital in Lorain, Ohio, and served residencies at Brent and Harper hospitals in Detroit. His specialty is general and vascular surgery.

* * * *

Dr. Spencer L. Bivens, Jr., 1200 Quarrier Street, Charleston (Kanawha). Doctor Bivens, a native of Charleston, was graduated from West Virginia University and received his M. D. degree in 1964 from the WVU School of Medicine. He interned and served a residency at Charleston Memorial Hospital. His specialty is internal medicine.

* * * *

Dr. William H. Carter, 3101 MacCorkle Avenue, S. E., Charleston (Kanawha). Doctor Carter, a native of Washington, D. C., was graduated from the University of Virginia and received his M. D. degree in 1963 from the University of Virginia School of Medicine. He interned at Bellevue Hospital in New York and served residencies at that hospital and Duke University Hospital. He served as a Captain in the Medical Corps of the U. S. Air Force and his specialty is cardiology.

* * * *

Dr. James L. Deadwyler, The Fairmont Clinic, Fairmont (Marion). Doctor Deadwyler, a native of Elberton, Georgia, attended the University of Pittsburgh and received his M. D. degree in 1949 from the University of Virginia School of Medicine. He interned at the USPHS Hospital at Staten Island, New York, and served a residency at the USPHS Hospital in Boston. He served as a Medical Director with the USPHS, 1949-68, and his specialty is general surgery.

* * * *

Dr. T. Keith Edwards, Bluefield Sanitarium Clinic, Bluefield (Mercer). Doctor Edwards, a native of South Carolina, was graduated from the University of South Carolina and received his M. D. degree in 1955 from the Bowman Gray School of Medicine. He interned at the Columbia Hospital in Columbia, South Carolina, and served a residency at the North Carolina Baptist Hospital in Winston Salem. He served as a medical missionary in Nigeria, West Africa, and his specialty is obstetrics and gynecology.

Dr. Phillip B. Mathias, WVU Medical Center, Morgantown (Monongalia). Doctor Mathias, a native of Mathias, Hardy County, was graduated from West Virginia University and received his M. D. degree in 1966 from the WVU School of Medicine. He interned at Ohio Valley General Hospital in Wheeling and served a residency at the WVU Medical Center. He is a member of the U. S. Navy Reserves and his specialty is otolaryngology.

* * * *

Dr. Kerry W. McCluney, 124 Fincastle Lane, Bluefield (Mercer). Doctor McCluney, a native of Gilmer, Texas, was graduated from the University of Texas and received his M. D. degree in 1964 from the University of Texas Medical Branch at Galveston. He interned at John Peter Smith Hospital in Ft. Worth and served a residency at the Medical College of Virginia. He was previously located at the Medical College of Virginia and his specialty is diagnostic radiology.

* * * *

Dr. Josefina M. Orteza, 749 Chestnut Ridge Road, Morgantown (Monongalia). Doctor Orteza, a native of the Philippines, was graduated in 1945 from the University of the Philippines School of Medicine. She interned at Euclid-Glenville Hospital in Euclid, Ohio, and served residencies at hospitals in Ohio, Connecticut and Pennsylvania. She previously was located in Canada and St. Louis, Missouri, and her specialty is pathology.

* * * *

Dr. Harvey D. Reisenweber, P. O. Box 1127, Martinsburg (Eastern Panhandle). Doctor Reisenweber, a native of Baltimore, was graduated from the University of Maryland and received his M. D. degree in 1965 from the West Virginia University School of Medicine. He interned at Norfolk General Hospital in Norfolk, Virginia, and served a residency at Methodist Hospital in Indiana. He served as a Lieutenant in the Medical Corps of the U. S. Navy, 1966-68, and he is engaged in general practice.

* * * *

Dr. Robert L. Smith, 900 Chestnut Ridge Road, Morgantown (Monongalia). Doctor Smith, a native of Keithsburg, Illinois, was graduated from Bradley University and received his M. D. degree in 1944 from the University of Illinois School of Medicine. He interned at the USPHS Hospital in San Francisco and served a residency at Wisconsin State Sanitarium. He served as an Assistant Surgeon General with the Medical Corps of the U. S. Navy and his specialty is preventive medicine.

* * * *

Dr. Hawey A. Wells, Jr., Princeton Community Hospital, Princeton (Mercer). Doctor Wells, a native of Princeton, was graduated from West Virginia University and received his M. D. degree in 1960 from the Medical College of Virginia. He interned and served a residency at the Medical College of Virginia Hospitals. He served as a Senior Assistant Surgeon in the USPHS and was formerly located in Uniontown, Pennsylvania. His specialty is pathology.

Promotions, Tenure Awarded WVU Medical Faculty

President James G. Harlow of West Virginia University has announced 32 promotions or grants in tenure, to be effective July 1, for faculty members at the Medical Center. The staff members are among 90, in all, at WVU to be advanced in rank or granted tenure.

Here are the Medical Center promotions and grants of tenure:

School of Dentistry

Minter L. Chapman, Assistant Professor (part-time), Operative Dentistry; Kenneth D. Eye, Associate Professor and granted tenure, Oral Diagnosis; James A. Griffin, Associate Professor and granted tenure, Endodontics; Harold A. Jones, Assistant Professor, Crown and Bridge; James B. Kirkwood, Assistant Professor, Pedodontics; Donald J. Morrison, Assistant Professor, Periodontics; Lee F. Straub, Associate Professor and granted tenure, Prosthodontics; and James G. Thomas, Associate Professor and granted tenure, Oral Diagnosis.

School of Medicine

Marylou R. Barnes, Associate Professor and granted tenure, Physical Therapy; Kamal M. Benham, Associate Professor and granted tenure, Obstetrics and Gynecology; Roy L. Butcher, Associate Professor and granted tenure, Anatomy; Shi-Ming Samuel Chou, Professor and granted tenure, Neurology; Charles R. Craig, Associate Professor and granted tenure, Pharmacology; Paul C. Davidson, Associate Professor, Medicine; Jose A. Gutrecht, Associate Professor and granted tenure, Neurology; David S. Hall, Associate Professor and granted tenure, Preventive Medicine; George H. Khoury, Professor and granted tenure, Pediatrics; Dennis F. Kohn, Assistant Professor, Surgery; Joseph R. Lancaster, Associate Professor, Surgery; German Lizarralde, Associate Professor and granted tenure, Medicine; David J. Moffa, Assistant Professor, Biochemistry; Antonio Palladino, Associate Professor and granted tenure, Obstetrics and Gynecology; Gale W. Rafter, Professor and granted tenure, Biochemistry; Satyabhlashi Rochlani, Associate Professor and granted tenure, Pathology; Robert Salisbury, Assistant Professor, Clinical Pathology; Mabel M. Stevenson, Associate Professor and granted tenure, Clinical Pathology; and William A. Welton, Professor and granted tenure, Dermatology.

School of Nursing

Patricia A. Diehl, granted tenure, Nursing; Barbara E. Goddard, Assistant Professor, Maternal-Child Nursing; Virginia P. Hagemann, Professor and granted tenure, Pediatric Nursing; Nancy A. Koontz, Assistant Professor, Medical-Surgical Nursing; and Barbara B. Weller, Associate Professor and granted tenure, Maternal-Child Nursing.

Looking Back 10 Years . . .

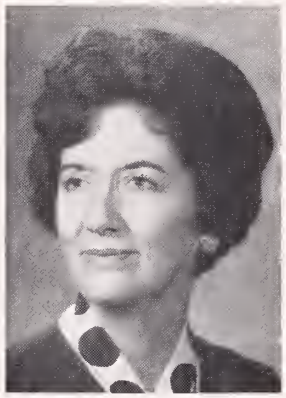
These physicians were among 23 who received Presidential Citations during the Annual Meeting of 1961. Left to right: Drs. Thomas L. Harris, S. William Goff and William E. Gilmore, all of Parkersburg; Dr. E. Lyle Gage of Bluefield; and Dr. Richard W. Corbitt of Parkersburg, who later became President of the Association.

Participants and speakers for the Second State Medical Education Planning Conference in Charleston April 24-25 came from a wide range of medical and other health care activities. In the left photo above, Dr. George R. Callender, Jr., of Charleston, President of the West Virginia State Medical Association, reviews some of the Conference proceedings with Dr. Frank W. McKee (center), Dean of the West Virginia University School of Medicine, and Dr. C. H. William Ruhe (right), of Chicago, Director of the American Medical Association's Division of Medical Education. In the right photo, Dr. Gerald H. Escovitz, Director of Regional Medical Program Activities at the Medical College of Pennsylvania in Philadelphia, talks with Doctor McKee and LeRoy C. Erickson (right), Director of Educational Activities for the Pennsylvania Medical Society's Council on Education and Science.

Mrs. Robert J. Tchou To Head AMA Auxiliary Delegates

Mrs. Robert J. Tchou of Williamson will head the West Virginia delegation to the 48th Annual Meeting of the Woman's Auxiliary to the American Medical Association set for June 20-24 at Atlantic City. The meeting will be in conjunction with the AMA's 120th annual session.

Mrs. Tchou, as President of the Woman's Auxiliary to the West Virginia State Medical Association, will serve as the State's Presidential Delegate at the national group's business sessions.



Mrs. Robert J. Tchou

Other Delegates designated by Mrs. Tchou are Mrs. M. Bruce Martin and Mrs. Wilson P. Smith, both of Huntington, and Mrs. Joe N. Jarrett of Oak Hill.

Mrs. Herbert Stelling of Romney, Mrs. Frank Holroyd of Princeton and Mrs. Hu C. Myers of Philippi have been named by Mrs. Tchou as Alternate Delegates.

The Auxiliary sessions, expected to attract more than 2,000 wives of physicians from across the nation, will include particular emphasis on youth activities, and will feature a number of outstanding speakers.

Dr. Walter C. Bornemeier, outgoing President of the AMA, will speak at a luncheon on Monday, June 22. Mrs. Patricia Reilly Hitt, Assistant Secretary, Community Field Service, U. S. Department of Health, Education and Welfare, will address a June 22 luncheon honoring Past Presidents, State Presidents and honorary members.

A conference for State Presidents and Presidents Elect on Wednesday, June 23, will have as its topic "Ideas Unlock the Future." Mrs. Martin is President Elect of the West Virginia Auxiliary.

A program for the Auxiliary sessions was provided in the May 3 issue of *The Journal of the American Medical Association.*

Cabell Physicians Volunteer To Assist Marshall

Three Huntington physicians were among those who died with the Marshall University football team and its coaches in last November's airplane crash. Two had served the Marshall program in various ways for several years.

At its April meeting, the Cabell County Medical Society received a request from Marshall's new Athletic Director, Joseph McMullen, asking for volunteer help in physical examinations for future Thundering Herd athletes; and the appointment of a Society member as a regular team physician.

Several physicians immediately offered their services. Eleven were on hand to help with the physicals when Marshall coaches greeted 47 candidates for spring drills in preparation for the Herd's return to the playing field next fall.

State Tax Commissioner Charles Haden, II, gave an interesting talk on West Virginia tax laws and their importance to all physicians at the April 8 Cabell Society's meeting, and Dr. Jaime Lazaro was elected to membership.

Change of Address

Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. Notices should be mailed to Box 1031, Charleston, West Virginia 25324.

Participants in the West Virginia Academy of Ophthalmology and Otolaryngology's National Spring meeting at The Greenbrier in White Sulphur Springs in April included those pictured above, from left to right: J. Elliott Blaydes, Jr., M. D., Bluefield, the Academy's Secretary-Treasurer; Albert C. Esposito, M. D., Huntington, an Academy Director; Robert Welsh, M. D., Miami, Florida; A. Benedict Rizzuti, M. D., New York, New York; John Chambers, M. D., Baltimore, Maryland; David Paton, M. D., Houston, Texas; Nime K. Joseph, M. D., Wheeling, the Academy's Vice President; and Worthy W. McKinney, M. D., Beckley, a Director.

Doctor Jarrett Becomes President Of General Practitioners

The West Virginia Academy of General Practice installed Dr. Joe N. Jarrett of Oak Hill as its President and named Dr. Richard E. Flood of Weirton as its President Elect during its 19th Annual Scientific Assembly April 30-May 2 at Oglebay Park in Wheeling.

Doctor Jarrett succeeded Dr. James E. Spargo of Wheeling. Other officers elected include Dr. Donald P. Brown, Kingwood, Vice President; Dr. William

Joe N. Jarrett, M. D.

Richard E. Flood, M. D.

D. Crigger of South Charleston, Secretary, and Dr. John W. Traubert, Wellsburg, Treasurer.

Dr. C. Carl Tully of South Charleston will continue for another year as Chairman of the Board of Directors. Others named to the Board include Dr. Marshall J. Carper of Charleston, Dr. Michael A. Gaydosh, Jr., of Wheeling, Dr. Asel P. Hatfield of Harrisville and Dr. Ray M. Kessel of Logan.

The general practitioners endorsed the candidacy of Dr. C. A. (Carl) Hoffman of Huntington for President Elect of the American Medical Association at the AMA's annual meeting in Atlantic City in June; and also endorsed Dr. Carl B. Hall of Charleston for the Board of Directors of the American Academy of General Practice. The AAGP will hold its annual meeting in Miami, Florida, in October.

Here is the text of the resolution adopted unanimously in support of Doctor Hoffman's candidacy:

"WHEREAS, The Presidency of the American Medical Association is the highest elective honor which may be attained by an American physician, and

"WHEREAS, The State of West Virginia has a deserving candidate for that high office, and

"WHEREAS, many of the members of the American Academy of General Practice also are members of the House of Delegates of the American Medical Association, which will have the responsibility of nominating and electing a President Elect of the AMA at its Annual Meeting in June, 1971, and

"WHEREAS, Dr. C. A. Hoffman of Huntington has, for many years, demonstrated his administrative and leadership qualities in both medical and lay activities, and has deservedly gained state and nationwide recognition for his accomplishments,

"THEREFORE, BE IT RESOLVED, By the West Virginia Chapter of the American Academy of General Practice, that Doctor Hoffman is recognized for his faithful service to organized medicine on local, state and national levels, and

"BE IT FURTHER RESOLVED, That this West Virginia Chapter does earnestly request the active support of Doctor Hoffman's candidacy by all members of the Academy, and in particular by those members who are members of the House of Delegates of the American Medical Association, and

"BE IT FURTHER RESOLVED, That a copy of this resolution be placed in the hands of each Delegate to the House of Delegates of the American Medical Association."

WVU Program Gets Federal Grant

Dr. Alvin L. Watne, Professor of Surgery at the West Virginia University School of Medicine, is in charge of a clinical and experimental program in cancer research for which a $23,680 U. S. Public Health Service grant has been provided.

Here are the new officers elected by the West Virginia Chapter, American College of Surgeons, at its April 29-May 1 meeting at The Greenbrier in White Sulphur Springs. Pictured from left to right are Dr. James P. Thomas, Bluefield, Secretary-Treasurer; Dr. Alvin L. Watne, Morgantown, Vice President; Dr. Charles D. Hershey of Wheeling, ACS Governor for West Virginia; Dr. David B. Gray, Charleston, President, and Dr. Herbert G. Dickie, Jr., Wheeling, immediate Past President.

WVU Names Dr. Robert N. Clark Orthopedic Surgery Chairman

Dr. Robert N. Clark will join the West Virginia University faculty July 1 as Chairman of the Division of Orthopedic Surgery in the School of Medicine's Department of Surgery.

Robert N. Clark, M. D.

He will succeed Dr. Justus C. Pickett, who has served as Chairman of the division since 1960 and who will continue to serve as Clinical Professor. The faculty of the division also includes Dr. Lawrance S. Miller, Clinical Professor; Dr. James H. Wiley, Clinical Associate Professor, and Dr. K. Douglas Bowers, Jr., Clinical Assistant Professor.

Doctor Clark's appointment was announced by WVU President James G. Harlow and Dean Frank W. McKee of the School of Medicine.

Since 1969, the new Chairman has been Staff Orthopedist at St. Albans Naval Hospital in New York. For a year prior to his Navy service, he was a research fellow at the Hospital for Sick Children in Toronto, Canada, and a member of the University of Toronto faculty.

He is a native of Malden, Massachusetts, received his bachelor's degree from Rutgers University and earned his medical degree from the University of Pennsylvania. During his junior year in medical school, he received a Smith, Kline and French travel fellowship and spent several months in Nepal and England. After an internship at the University of Minnesota Hospitals, Doctor Clark was a surgical resident and, subsequently, a clinical instructor at the University of Pittsburgh.

He is a Diplomate of the American Board of Orthopaedic Surgery.

West Virginia Hospitality Suite In Atlantic City

West Virginia physicians and their wives are cordially invited to visit the hospitality suite of the West Virginia State Medical Association during the annual meeting of the American Medical Association in Atlantic City in June.

The suite will be in the Haddon Hall Hotel and the room number will be posted on the bulletin board in the lobby. The suite will be open from 5 to 7 P.M. on Sunday, Monday, Tuesday and Wednesday evenings, June 20-23.

If you plan to attend the AMA Convention, make it a point to drop by the West Virginia suite.

Medical Meetings

The following is a partial list of national, state and district medical meetings scheduled in the coming months.

1971

June 17-18—Am. Rheumatism Assn., New York.
June 20-24—AMA, Atlantic City.
June 22-23—Am. Diabetes Assn., San Francisco.

Aug. 19-21—104th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Aug. 23-26—Am. Hosp. Assn., Chicago.

Sept. 9-11—Am. Assn. of Ob.-Gyn., Hot Springs, Va.
Sept. 13-17—Int. Conf. on Coal Workers Pneumoconiosis, New York City.
Sept. 17-18—W. Va. Heart Assn., Clarksburg.
Sept. 20-24—Am. Acad. of Oph. and Otol., Las Vegas.
Sept. 21-23—Ky. Medical, Louisville.
Sept. 23—Rural Health Conference, Jackson's Mill.

Oct. 1-8—AAGP, Miami Beach.
Oct. 3-7—Pa. Medical, Pittsburgh.
Oct. 11-14—Ind. Medical, Indianapolis.
Oct. 14-17—Va. Medical, Arlington.
Oct. 16-21—Am. Acad. of Ped., Chicago.
Oct. 16-20—Am. Soc. of Anes., Atlanta.
Oct. 18-22—ACS, Atlantic City.
Oct. 24-28—Am. Col. of Chest Phys., Philadelphia.

Nov. 3-6—Am. Soc. of Cyt., Washington.
Nov. 9-16—Am. Heart Assn., Anaheim, Calif.
Nov. 28-Dec. 1—AMA Clinical, New Orleans.

Dec. 4-9—Am. Acad. of Derm., Chicago.
Dec. 5-7—Am. Acad. of Hema., San Francisco.

1972

Jan. 24-26—Soc. of Thoracic Surg., San Francisco.

Feb. 4-12—Am. Soc. of Clin. Path. & Col. of Am. Path., Atlanta.
Feb. 5-6—AMA Cong. on Med. Educ., Chicago.

March 1-5—Am. Col. of Cardiology, Chicago.
March 2-4—Central Surg. Assn., Chicago.
March 6-7—Int. Acad. of Path., Chicago.
March 27-30—Southeastern Surg. Cong., Washington.

April 3-8—Am. Col. of Rad., Bal Harbour, Fla.
April 13-18—Am. Derm. Assn., Dorado Beach, P. R.
April 16-20—Am. Assn. of Neu. Surg., Boston.
April 16-21—ACP, Atlantic City.
April 17-20—Am. Col. of Ob. & Gyn., Chicago.
April 24-29—Am. Acad. of Neurology, St. Louis.
April 26-29—Am. Ped. Soc., Atlantic City.
April 26-29—W. Va. Acad. of Oph. and Otol., White Sulphur Springs.

May 1-3—Am. Assn. for Thoracic Surgery, Los Angeles.
May 1-5—Am. Psy. Assn., Washington.
May 3-5—Maryland Medical, Baltimore.
May 3-6—W. Va. Chap., ACS, White Sulphur Springs.
May 6—Am. Col. of Psy., Dallas.
May 8-12—Ohio Medical, Cincinnati.
May 18-20—Am. Gyn. Soc., Hot Springs, Va.
May 21-24—Am. Thoracic Soc., Kansas City.
May 22-25—Am. Urol. Assn., Washington.

June 8-14—Am. Rheumatism Assn., Dallas.
June 18-22—AMA, San Francisco.
June 24-25—Am. Diabetes Assn., San Francisco.

The West Virginia Medical Journal

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Canine Histoplasmosis and Blastomycosis in Monongalia County, West Virginia: Prevalence of Immunodiffusion Reactors

Vicki DeBiase, M. T.; David S. Bauman, Ph. D., and Ernest W. Chick, M. D

Variations in geographic distribution of fungi such as *Histoplasma Capsulatum* and *Blasotmyces dermatitidis* may influence dramatically the numbers of patients seen within a given region. Large scale skin test surveys of human populations have indicated the common occurrence of asymptomatic and mild cases of histoplasmosis and have raised the index of suspicion leading to improved diagnosis of the more severe cases of histoplasmosis. Unfortunately, due to lack of appropriate antigens, this has not occurred with blastomycosis. Studies of skin tests and serologic reactors in dogs have provided additional information for more precise localization of fungal prevalence within given areas for histoplasmosis and blastomycosis.[7, 8, 9, 10, 11]

Histoplasmin reactor rates in West Virginia may vary by county from approximately 0 to 40 per cent. [1, 3, 13] Rates for blastomycin reactors are unknown. It was of interest to determine if the rate of serologic canine reactors to histoplasmin would compare to human skin test reactor in a given county in West Virginia, and if such determinations might be a useful adjunct to determine rates in other locations. It was also of interest to determine if canine reactors to blastomycin existed and, if so, to what extent.

Materials and Methods

Animals—From August, 1968, to February, 1969, a series of dogs obtained from Monongalia County, West Virginia, were bled and tested serologically for histoplasmosis and blastomycosis.

The dogs were procured from two sources: (1) 154 from the West Virginia University Medical Center dog pound, and (2) 58 from local veterinarians.

The Authors

- **Vicki DeBiase, M. T.; David S. Bauman, Ph. D., and Ernest W. Chick, M. D., Division of Preventive Medicine, and the School of Medical Technology, West Virginia University, Morgantown. Doctor Chick's current address is Mycology Program, University of Kentucky College of Medicine, Lexington.**

Preservation of Serum: Sera was placed into .5 ml. aliquotes and stored at 70°C. The vials of serum were rapid-thawed and mixed before use.

Preservation of Antigen: In testing for histoplasmosis undiluted histoplasmin was concentrated 10 times to yield the antigen. The blastomycin antigen was prepared in the same manner. Both antigens were of the mycelial phase.

Serologic Method: The serologic testing was performed with a modification of Busey's method for agar-gel precipitin technique.[2] A matrix (John S. Chapman, L. L. Pellet Co., Dallas, Texas) was employed which consists of 17 systems of seven holes providing a total of 102 peripherial wells per plate. The agar medium consisted of .5 M glycine, ,15 M NaCl, .5 per cent agarose and .5 per cent sodium azide. The agar was divided into 11 ml. aliquotes and stored under refrigeration. Prior to testing the serum, the agar was melted in 100°C. water broth; 6.5 ml. of agar was pipetted into the bottom of a petri dish and allowed to solidify. Three and one-half ml. agar was then pipetted over the first layer. Before solidification occurred with the second layer, the plastic matrix was placed into the agar. The petri dish was then refrigerated for 15 minutes, after which the excess agar was removed from the wells with suction. The wells

were filled completely with the desired antigen or antibody.

The test plates were incubated for 48 hours at 100 per cent humidity. One or more precipitin bands were accepted as a positive reaction. If a band was found, the agar-gel test was repeated.

Results

Of 212 dogs tested six (2.8 per cent) were positive for blastomycosis, while 4 (1.9 per cent) were positive for histoplasmosis. The springer or hound was the predominant type of dog exhibiting positive reactions. Both sexes were evenly represented. Eight of the 10 reactors were less than two years old. The remaining two were 15 and 16 years of age. There were three histoplasmin (1.9 per cent) and two blastomycin positives (1.3 per cent) among the 154 stray dogs from the pound. From the 58 veterinary dogs, one histoplasmin (1.7 per cent) and four blastomycin (6.9 per cent) reactors were found (See Table 1).

Discussion

The canine populations selected for this study represent a good cross section of an area by sampling of both rural and urban areas. The dog is easily obtainable and is the animal most frequently infected with histoplasmosis and blastomycosis.[4, 5, 6, 11, 14] Two different groups of dogs were tested. The stray dogs from the pound represent a better cross section of the county than do the veterinary dogs. The veterinary specimens were biased, since most of these dogs were exhibiting symptoms, some of which were pulmonary. Therefore, the chances of finding a positive reactor among the veterinary group were increased (see Table 1).

Blastomycin reactors (2.8 per cent) were more frequent than histoplasmin reactors (1.9 per cent). This indicates an unsuspected, greater occurrence of Blastomyces in Monongalia County.

Human and animal rates of histoplasmosis have been found to parallel each other. The 1.9 per cent Histoplasmin canine reactors compared reasonably with the 1-7 per cent human skin test reactors from Monongalia County.[1] Similar blastomycin skin test reactor rates are not available, since a reliable skin test antigen is lacking.

In recent studies comparing the frequency of canine to human blastomycosis, the number of canine cases found was up to 13 times the human rate.[8, 9, 10] By accepting the stray dogs from the pound as a thorough sampling, the predicted number of humans infected may be as high as 1-4 per 100,000 persons.

No active cases of blastomycosis or histoplasmosis have been reported from Monongalia County.[1, 13] Since the dogs were from this county, these fungi must be present in the soil at least within areas of the county. More intensive case finding methods should be productive.

For future studies of this type, i.e., detection of *Histoplasma* and *Blastomyces* occurrence in a specific area by examining dogs, it is recommended that the sporting type dog be selected. If age of the animals can be discerned, a selection can be made for the young pup (less than two years).

Summary

Immunodiffusion rates of reactors to histoplasmin in mongrel dogs in Monongalia County is within range of known human skin test reactor rates. Comparable human skin test rates are not available for comparison to the unexpectedly high canine blastomycin immunodiffusion rates. It appears that survey of the canine population of a given area may provide a more precise determination of fungal prevalence.

References

1. Andrews, C. E., Lawless, J. J. & Ruggiaro, J.: Histoplasmin Sensitivity in West Virginia, Am. Rev. Resp. Dis. 89:409-415, 1964.
2. Busey, J. F. & Hinton, P. F.: Precipitins in Histoplasmosis, Am. Rev. Resp. Dis. 92:637-639, 1965.
3. Chick, E. W.: Editorial—North American Blastomycosis, *The West Virginia Medical Journal* 62:444, 1966.
4. Cole, C. R.: Histoplasmosis in Animals, J. Am. Vet. M. A. 22:471-473, 1953.
5. Monbreum, W. A.: Dog as Natural Host of Histoplasma Capsulatum, Am. J. Trop. Med. 19:565-587, 1939.
6. Emmons, E. W., Rowley, D. A., Olson, B. J., Mattern, C. F., Bell, J. A., Powell, E. & Marcey, E. A.: Histoplasmosis Proved Occurrence of Inapparent Infection in Dogs, Cats and Other Animals, Am. J. Hyg. 61:40-44, 1955.
7. Furcolow, M. L. & Menges, R. W.: Comparison of Histoplasmin Sensitivity Rates Among Human Beings and Animals in Boone County, Missouri, Am. J. Pub. Health 42:926-929, 1952.

Table 1
Immunodiffusion Reactions

	Number of Dogs Tested	*Positive for Histoplasmosis*	%	*Positive for Blastomycosis*	%
Veterinary Dogs	58	1	1.7	4	6.9
Pound Dogs	154	3	1.9	2	1.3
Total	212	4	1.9	6	2.8

8. Furcolow, M. L., Chick, E. W., Busey, J. F. & Menges, R.: Prevalence and Incidence Studies of Human and Canine Blastomycosis. I. Cases in the United States, 1885-1968. Am. Rev. Resp. Dis. 102:60-67, 1970.
9. Furcolow, M. L., Busey, J. F., Menges, R. W. & Chick, E. W.: Prevalence and Incidence Studies of Human and Canine Blastomycosis. II. Yearly Incidence Studies in Three Selected States, 1960-1967, Am. J. Epid. 92:121-131, 1970.
10. Menges, R. W., Furcolow, M. L., Selby, L. A., Ellis, H. R. & Haberman, R. T.: Clinical and Epidemiologic Studies on 79 Canine Blastomycosis Cases in Arkansas, Am. J. Epid. 81:164-179.
11. Menges, R. W., Haberman, R. T., Selby, L. A. & Ellis, H. R.: A Review and Recent Findings on Histoplasmosis in Animals, Vet. Med. 58:331-338, 1963.
12. Menges, R. W., McClellan, J. T. & Ausherman, R. J.: Canine Histoplasmosis and Blastomycosis in Lexington, Kentucky, Am. J. Vet. Med. Assoc. 124:235-241, 1954.
13. Pfister, A. K., Kuhn, B. H., Ellison, A. B. & Walker, J. H.: Blastomycosis in West Virginia, *The West Virginia Medical Journal* 61:103-108, 1965.
14. Rowley, D. A., Haberman, R. T. & Emmons, C. W.: Histoplasmosis: Pathologic Studies of 50 Cats and 50 Dogs from Loudon County, Virginia, J. Infect. Dis. 95:98-108, 1954.

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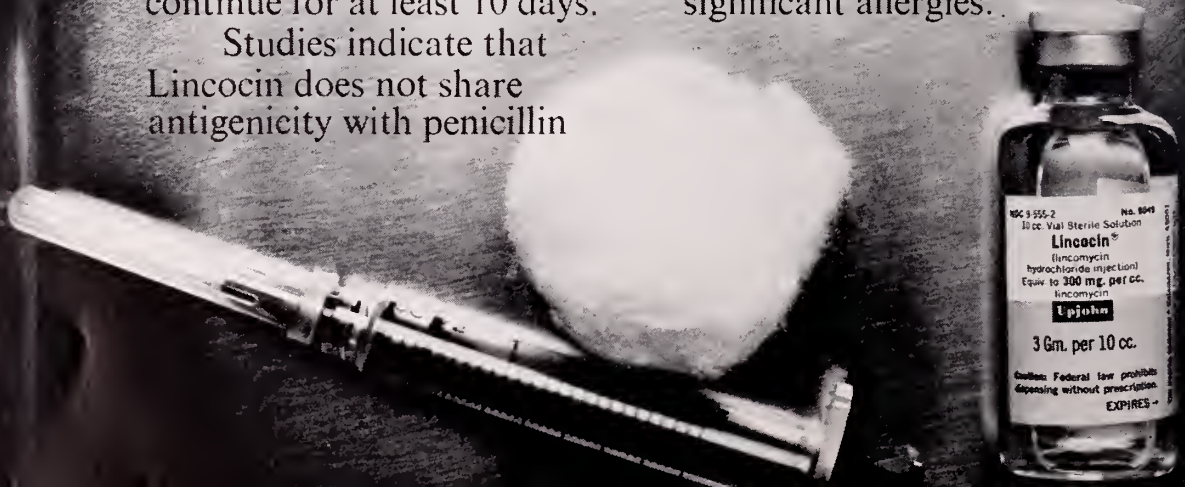

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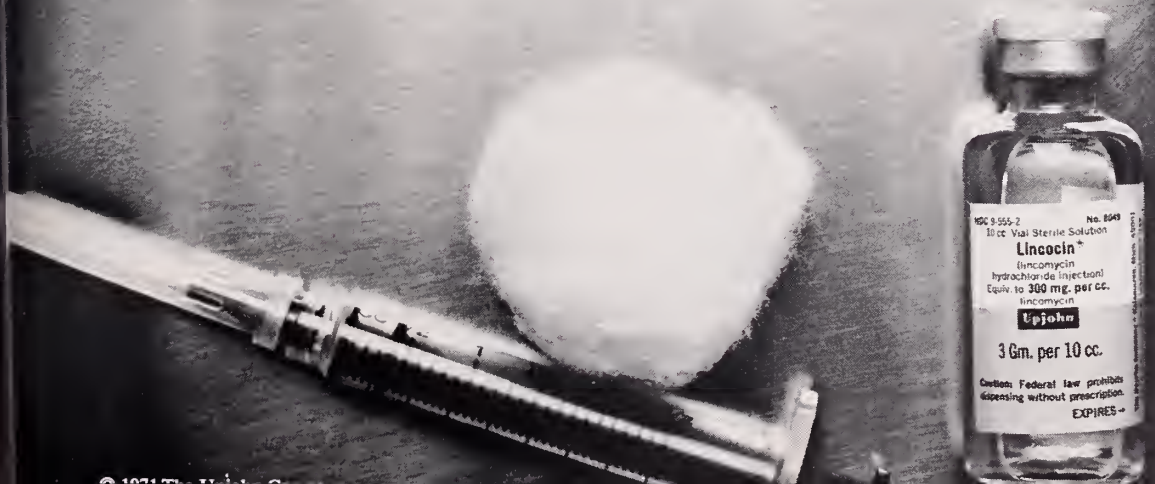

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PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances.

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Rheumatic Fever Under Three Years of Age

Farid Waly, M. D., and George Khoury, M. D.

The natural history of rheumatic fever has altered during the past two decades because of the widespread use of penicillin prophylaxis and improvement in the diagnostic techniques.[1] Rheumatic fever under three years of age is rare and in a recent report[2] the incidence was found to be 0.5 per cent of all initial attacks in a large group of patients with the disease. The mode of presentation is usually different and the diagnosis often is delayed. The aim of this communication is to report rheumatic fever in a three-year-old boy who presented with congestive heart failure and subcutaneous nodules in the scalp.

The Authors

- **Farid Waly, M. D., Resident in Pediatrics; and George Khoury, M. D., Professor of Pediatrics and Director of Pediatric Cardiology, West Virginia University School of Medicine, Morgantown.**

Case Report

T. M., a three-year-old boy, was referred to WVU Medical Center for evaluation of a heart murmur and cardiomegaly, also possible congestive heart failure.

History of Present Illness: Six weeks prior to his referral, he developed swelling in the neck which was allegedly diagnosed as mumps and following this he became less active and appeared to get tired easily. One week prior to admission, he developed fever and cough. Physical examination at this time revealed a loud heart murmur which was heard for the first time. The chest roentgenogram showed pneumonitis and cardiomegaly. He was treated with penicillin with no improvement. Three days prior to admission he developed shortness of breath and the parents felt multiple nodes in the scalp.

Developmentally, he was the product of full-term normal pregnancy and uncomplicated delivery. His birth weight was eight pounds. His developmental milestones were normal. The family history was negative for congenital heart disease or rheumatic fever.

Physical Examination: His temperature was 98 degrees and the respiratory rate was 30/minute. The peripheral pulses were strong and the pulse rate was 140/minute and regular. He appeared pale and listless. Multiple subcutaneous nodes were palpable in the scalp over the occipital area. The tonsils were hypertrophied and cryptic. There was bilateral anterior cervical lymphadenopathy. The lungs were clear to auscultation. The heart was overactive with a left ventricular heave. S1 was normal. S2 was split with accentuated pulmonary component. A grade 3/6 blowing holosystolic murmur was heard maximally at the apex and radiated to the left axilla and to the back. The liver edge was palpable 5 cm. below the right costal margin. The remainder of the examination was essentially normal.

Laboratory Findings

The hemoglobin was 10 Gm. per cent. The white count was 9,200/cubic mm. with 56 per cent polys, 3 per cent eosinophils, 36 per cent lymphocyctes. The sedimentation rate was 38 mm. in one hour. The ASO titre was 333 Todd units. C-reaction protein was negative. Nasopharyhgeal culture showed scanty diplococcus pneumonia. The electrocardiogram showed left atrial hypertrophy. Cardiac views with barium swallow revealed generalized moderate cardiomegaly with bilateral pulmonary venous congestion. The left atrium appeared enlarged (Figure 1-A).

Clinical diagnosis of rheumatic fever was based on the presence of subcutaneous nodules and carditis as indicated by the mitral insufficiency murmur.

Hospital Course

The patient was treated with Prednisone, salicylates, penicillin and digitalis. His response was dramatic. The subcutaneous nodes in the scalp disappeared three days after the start of therapy. The sedimentation rate became normal and the chest roentgenogram showed marked decrease in the lung congestion and decrease in the heart size (Figure 1-B). The patient was discharged on aspirin, Lanoxin and penicillin prophylaxis of 250,000 units b.i.d. He is currently doing well, active and asymptomatic. The heart murmur of mitral insufficiency, however, is still present.

Comment

Although the incidence of rheumatic fever under three years of age is rare, it should be considered in any child who presents with con-

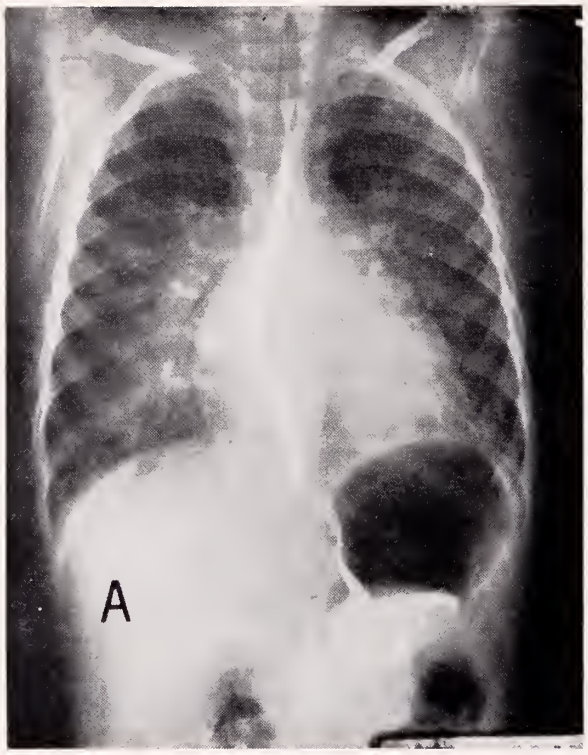

Figure 1-A

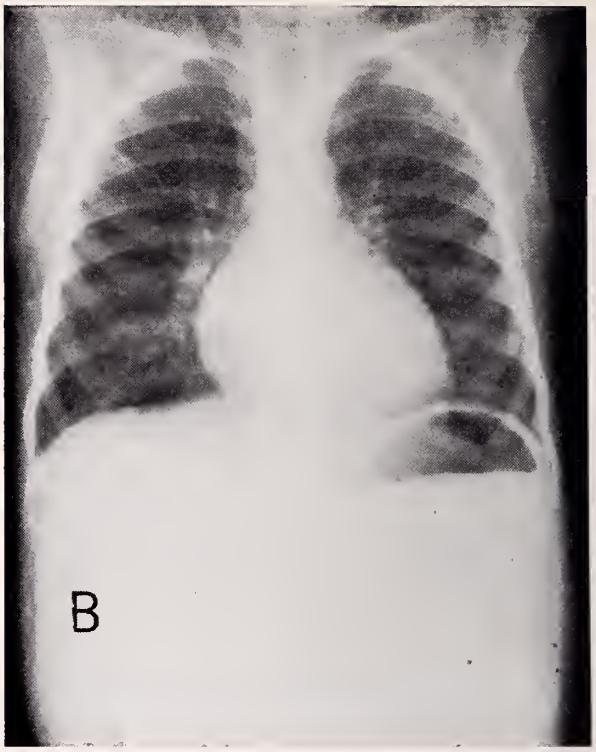

Figure 1-B

gestive heart failure and a mitral insufficiency murmur not previously heard. In the literature, [1-3] the diagnosis was made in the majority of cases on clinical grounds and in a few at autopsy by demonstrating Aschoff bodies in the myocardium.

In order not to overdiagnose, or miss rheumatic fever, one should keep in mind the modified Jones criteria prior to committing oneself to such a diagnosis (Table I). The clinical diagnosis in our patient was made on the basis of carditis and subcutaneous nodules, two major criteria in addition to several other minor criteria.

The diagnosis of rheumatic fever under three years of age is somewhat difficult and one has to depend not only on the clinical picture but also on the acute phase reactants, particularly the antistrepto-lysin-O titer and sedimentation rate. Polyarthritis, when present in this age group, has to be differentiated from rheumatoid arthritis, septic arthritis, leukemia and Schönlein-Henoch purpura.

Therapy should consist of steroid and salicylate as carditis in this age group usually is severe and may progress rapidly. The current consensus is that penicillin prophylaxis should be continued for life.

Summary

The clinical picture and management of rheumatic fever and carditis in a three-year-old boy is presented. Although the incidence is rare, the possibility of such diagnosis should be kept in mind in any youngster who presents with congestive heart failure, carditis with mitral insufficiency murmur not previously heard and associated abnormal phase reactants.

References

1. Lucas, R. V.: Acute Rheumatic Fever: A New Look, Lancet 87:230, 1967.
2. Rosenthal, A., Czoniczer, G. & Massell, B. F.: Rheumatic Fever Under Three Years of Age, Pediatrics 41:612, 1968.
3. Powell, O. & Miller, R. E.: Rheumatic Myocarditis in an Infant Nine Months of Age, J. Pediat. 74:123, 1969.
4. McIntosh, R. & Wood, C. L.: Rheumatic Infections Occurring in the First Three Years of Life, Am. J. Dis. Child. 49:835, 1935.

Table 1
Revised Jones Criteria

Major Manifestations	*Minor Manifestations*
Carditis	Previous rheumatic fever or rheumatic heart disease
Polyarthritis	Arthralgia
Chorea	Fever
Erythema Marginatum	Acute phase reactions
Subcutaneous Nodules	Erythrocyte sedimentation rate
	C-reactive protein, leukocytosis
	Prolonged P-R interval

Plus
Supporting evidence of preceding streptococcal infection.

Special Article

GRANDPA'S GRANDPA*

Walter C. Bornemeier, M. D.

GRANDPA'S Grandpa was scheduled to die tomorrow, but three members of the family said they positively couldn't get away for his funeral any time soon, so the demise of Grandpa's Grandpa was postponed again, giving him his sixth new lease on life.

He's a very old man now and a lot of grandpas have come and gone in our family in his time. That's why we call him GG for short, to tell him apart from the others.

GG died once, but at the time he was in the hospital having surgery for a hernia. When his failing heart stopped, they hooked him up to an artificial heart and restored his life. That was more than 50 years ago, when GG was about 75, and the doctors and nurses who performed that hook-up are now gone.

What with Social Security, Medicare, and his annuity, GG has always had good care and has never really been an invalid. He has had a couple of leg fractures and an occasional bout of asthma or indigestion, but on the whole his health is good, considering his 125 years. He weighs only 90 pounds, so it doesn't cost much to keep him—two small meals a day and a bit of wine. He doesn't smoke and he sits so still that his clothing lasts for years, although it does get somewhat unfashionable.

The consensus seems to be that GG has a good disposition, otherwise the family would have let him die long ago—by just stealing the battery that runs his heart, for instance, or simply failing to replace it with a new one in June, causing a sure summer funeral.

About the time I was born, GG turned 100. That was the year when the family first decided that they should let GG pass away, a decision that, I understand, didn't come easily, but took the best part of an afternoon.

There was considerable opposition to letting GG die, mainly because he was not really in poor health for a man of his age. But it was admitted that, although he had a heart in good working order, his brain was badly run down.

By a slim majority, GG was doomed. And then he was resurrected. Someone, who had reached a pretty high station in life by living by the rules, noted that a quorum was not present.

After that first meeting, the subject of GG's funeral didn't come up again for years, possibly because his health seemed to be getting even better, but probably because GG was becoming an asset while his heirs became fewer and fewer.

A small sum of money he had once invested had grown quite large over the years because he used little of the income and the rest just kept accumulating and compounding.

In the summer of his 110th year GG's fate was again discussed at a family meeting. No one mentioned it openly, I've been told, but everyone knew that if GG was allowed to die then, a no-good grandnephew would get a sizeable portion of the estate.

The vote was in favor of keeping GG with us, and a farsighted vote it was because the no-good heir passed on within the year.

With the no-gooder gone, there seemed little reason to prolong the old gentleman's life, so a special session was called. It was noted at the meeting that GG was becoming more forgetful and he sometimes refused to eat. But before the matter came to a vote, a couple of juniors enrolled in pre-med at one of the universities spoke up and said GG was becoming a valuable research specimen.

The logic of their arguments won over the rest of the family, and GG's funeral was put off for the third time.

The Author

- **Walter C. Bornemeier, M. D., Chicago, Illinois; Immediate Past President of the American Medical Association.**

*Reprinted from the Chicago Tribune.

At times though, it almost seemed as if the decision had not been a wise one. During the following winter, GG fell and broke his right leg. Later he fell and broke his left leg. Each time he was hospitalized for six weeks before returning home.

While in the hospital, the artificial prolongation of his life, which everybody agreed was really quite useless, became the subject of widespread debate among doctors, nurses, medical students and orderlies.

Merely removing the stimulus to the artificial heart could not be considered murder, the argument went. After all, God had created GG with a heart and the heart was still present in the body. If the heart machine were turned off, then it was God's decision whether GG's human heart would function.

A meeting of the clan was called to discuss the wisdom of keeping GG alive, especially in the light of community pressure and gossip. But the family closed ranks—no outsiders were going to tell them what to do with their poor old Grandpa's Grandpa.

The fifth "make-the-decision" session, the first that I've attended, was rather serious because the nature of the problem had changed. A miraculous device had been invented which, if installed, would prolong GG's life indefinitely, possibly for hundreds of years.

Many problems had been created by the invention of that device, not the least of which was how to justify not using the machine. When Grandpa, at age 75, had become the recipient of an artificial heart, his existence simply had been presented to a future generation, to prolong or end as it thought best.

This new twist to the GG problem completely broke down the decision-making process. No decision was made—as I said before, three members of the family ended the discussion when they said they couldn't make it to a funeral, although we all knew that they really could.

So GG is 125 today, and I couldn't help thinking during the meeting . . .

The surgeon put a ticker in
To keep our Gramp alive.

But who will turn the gadget off
At a hundred twenty-five?

We often call a problem solved
Because it goes away.

And then we find to our chagrin
The same one's there next day.

But progress is our way of life,
So why should it seem strange.

If the questions must remain the same.
It's the answers we'll change.

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Electrocardiogram of the Month

Variant Angina Pectoris (Atypical Angina Pectoris)

Vicken V. Kalbian, M. D., and George A. Chapman, M. D.

Despite the advent of coronary arteriography and other invasive techniques of investigating the coronary circulation, the Master's two-step test remains a simple and valuable method of evaluating the patient with a history of chest pain, whose electrocardiographic tracing at rest is within normal limits. Depression of the S-T segment is the sine qua non of the test. In 1959, Prinzmetal, however, described a variant form of angina pectoris characterized by S-T segment elevation.[1] An example of this variant is present.

The Authors

- **Vicken V. Kalbian, M. D., and George A. Chapman, M. D., Medical Service, Veterans Administration Hospital, Martinsburg.**

Case History and ECG Analysis

A 58-year-old white male was investigated for episodes of anterior chest pain. The description

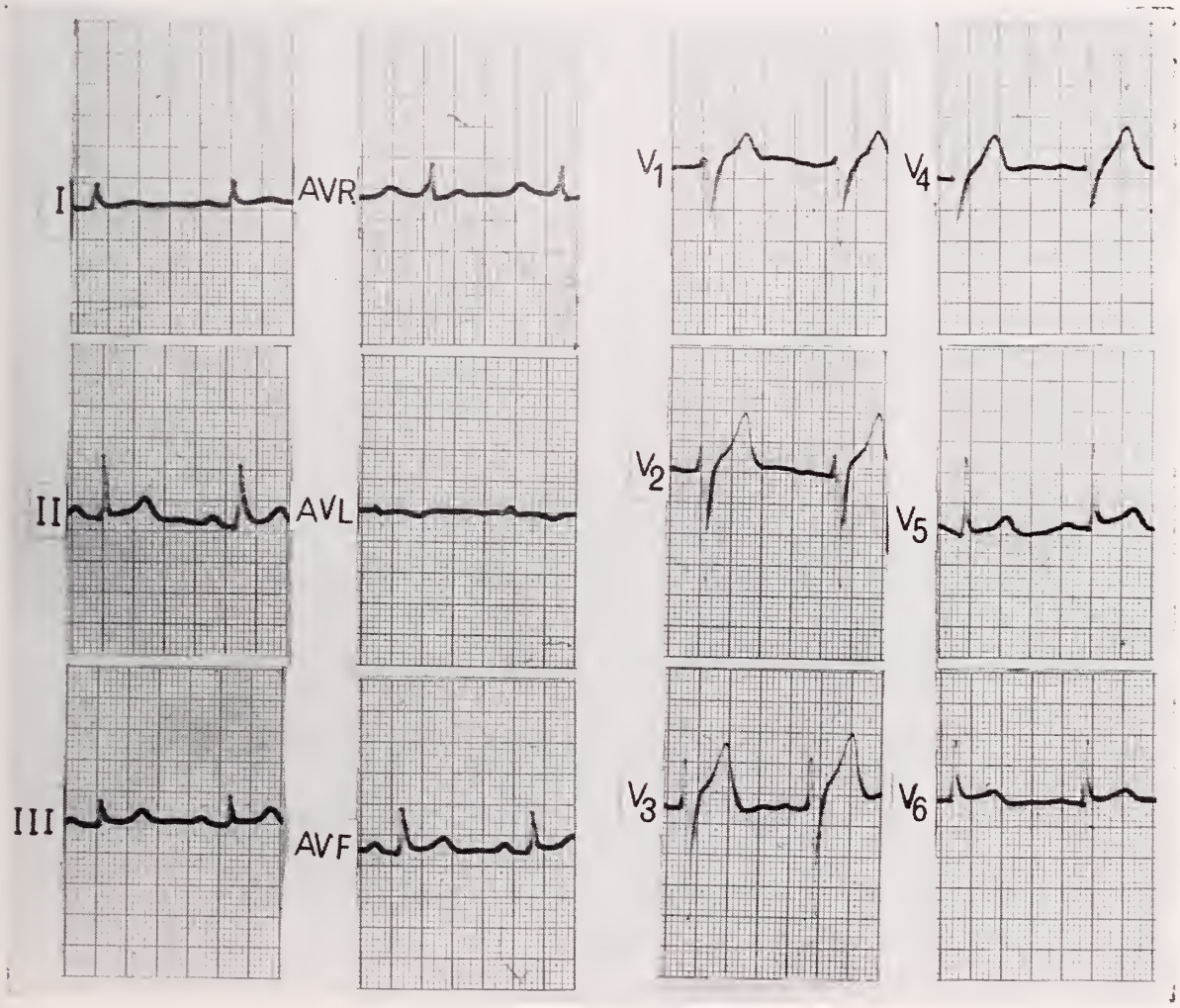

Figure 1. Resting electrocardiogram.

of the pain fell short of classical angina pectoris. Resting electrocardiogram was normal (Figure 1). He had symptoms of reflux esophagitis. A hiatal hernia was demonstrated radiologically. On performing the Master's test, the patient developed mild chest pain. Serial tracings are illustrated (Figure 2). There was the appearance of Q waves, a marked increase in amplitude of R waves with gross elevation of the S-T segment, and multifocal premature ventricular contractions in short runs of ventricular tachycardia, were all seen in leads over the anterior

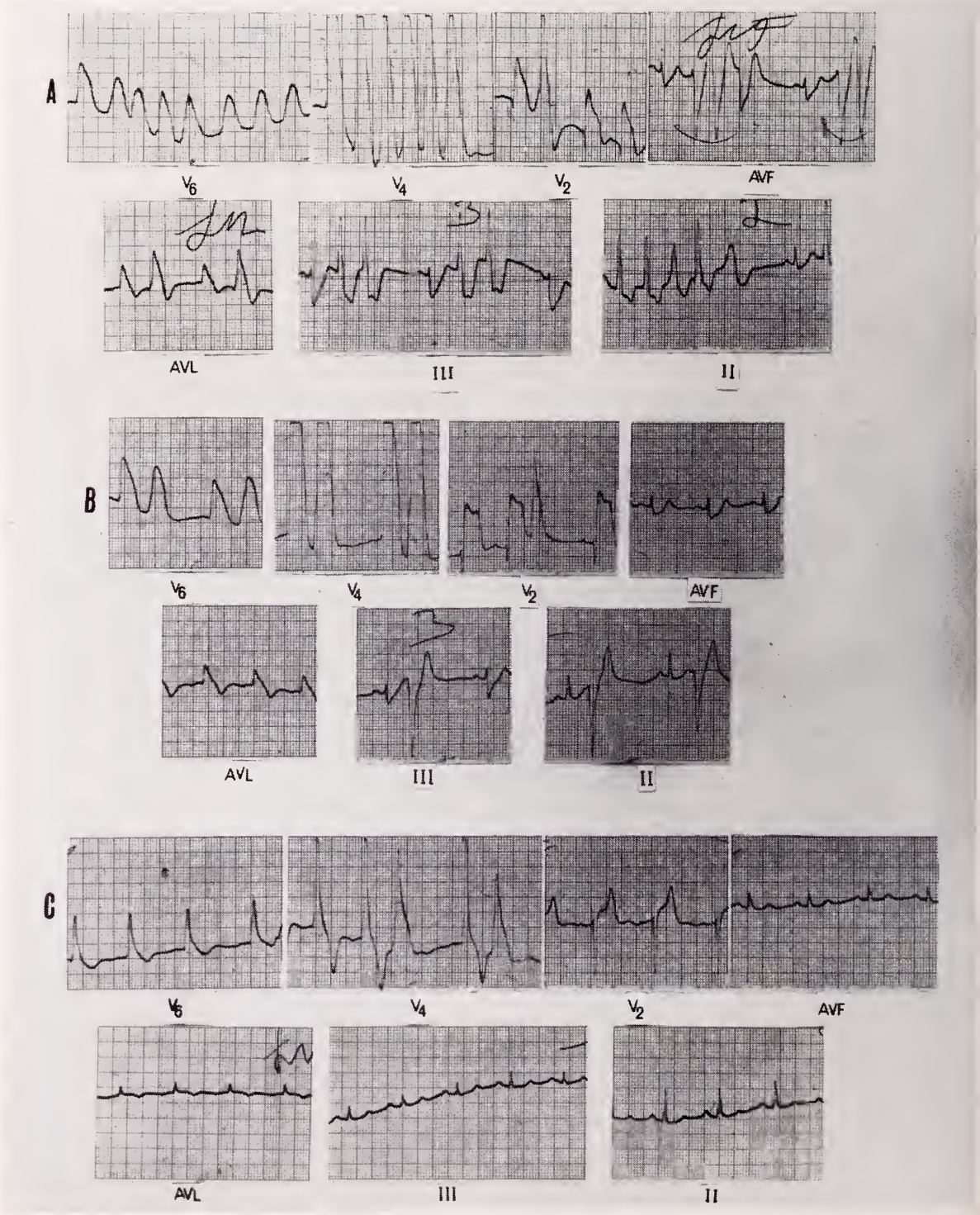

Figure 2. Tracing after Master's two-step test.
A is immediately after test.
B is two minutes later.
C is four minutes later.

surface of the heart. S-T segment depression appeared in reciprocal leads. Within minutes, there was disappearance of chest pain and reversion of the S-T segment to base line. Subsequent tracings have remained normal, and the patient did not develop serial elevation in his serum enzymes.

Comments

The variant angina pectoris (atypical angina pectoris) is an uncommon occurrence. In addition to his original description of 32 patients by Prinzmetal et al., only a few cases have been reported in the literature.[2, 3] Other than S-T segment elevation, the cases described have had chest pain at rest and also propensity to ventricular arrhythmia and various degrees of block. Our patient had a history of chest pain at rest, and he experienced palpitation which appeared to have been ventricular tachycardia.

In this unusual form of angina pectoris, chest pain occurs, in general, at rest but is not related to physical or emotional stress. The chest pain in this atypical angina pectoris often lasts longer than in the classical effort angina, and the pain is usually more severe. In addition, the chest pain in atypical angina is frequently recurrent in a cyclical and regular pattern. Nevertheless, age and sex distributions in both atypical and ordinary angina pectoris are essentially the same.

Electrocardiographically, variant angina produces S-T segment elevation in the involved zone with reciprocal S-T depression instead of the generalized S-T segment depression in classical angina. In variant angina, ischemic change is usually considered to be localized to a discrete area resulting from a stenotic lesion of one major coronary artery. Thus, acute myocardial infarction frequently follows the variant angina pectoris.

References

1. Prinzmetal, M., Kennamer, R., Merliss, R., Wada, T., and Bor, N.: Angina Pectoris; I. A Variant Form of Angina Pectoris, Amer. J. Med. 27:375, 1959.
2. Robinson, J.: Prinzmetal's Variant of Angina Pectoris: Report of a Case, Amer. Heart J. 70:797, 1965.
3. Hilal, H. and Massumi, R.: Variant Angina Pectoris, Amer. J. Cardiol. 19:607, 1967.

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To all physicians in training and especially West Virginia residents. West Virginia is in need of physicians in all categories for rural and urban practice. Any physician desiring information concerning openings in the State can communicate with *The Journal*. *The Journal* will publish free for 6 issues pertinent information concerning any qualified physician who is seeking a location in West Virginia. Single copies of *The Journal* listing practice opportunities will be mailed to physicians upon request.

A roster containing a list of officers of county societies and specialty sections of the West Virginia State Medical Association is available upon request to the headquarters offices. Also, information pertaining to West Virginia licensing laws will be mailed to interested physicians. Interested parties may then write the officers of component societies or sections for further information.

Any other information about West Virginia will be secured from outside sources, if possible, and sent upon request. All letters to *The Journal* will receive individual immediate attention.

X-Ray Case of the Month

Arthur E. Levy, M. D.

This 77-year-old white male patient was admitted to the hospital on April 16, 1971, with a chief complaint of pain in his mid-anterior chest following a fall of approximately four feet from his porch one hour earlier. He struck his chest on a small rock at that time. The patient was mentally alert and did not lose consciousness at the time of the fall. He was admitted with a blood pressure of 58/40 and a pulse of approximately 100 per minute. He was dyspneic and had difficulty in clearing his throat. Oxygen and suction were applied. Fluid was started and blood was immediately crossmatched. In spite of all efforts, the patient died approximately one and one-half hours after entering the hospital.

The Author

- **Arthur E. Levy, M. D., Chief, Department of Radiology, Williamson Appalachian Regional Hospital, Williamson.**

Figure 1 shows a chest x-ray at the time of this admission. Figure 2 shows a comparable view taken one month prior to this injury.

An autopsy revealed a rupture of the aorta just proximal to the take-off of the innominate artery.

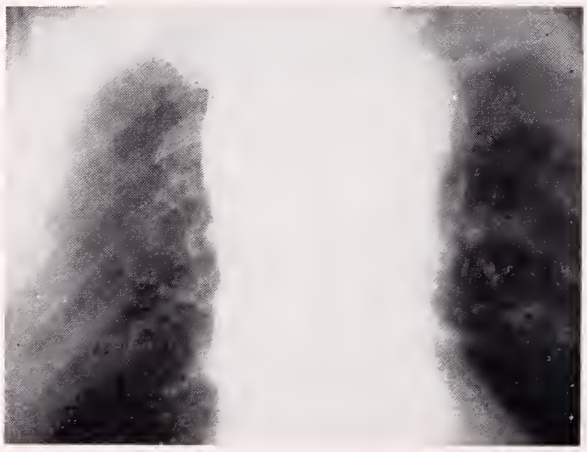


Figure 1

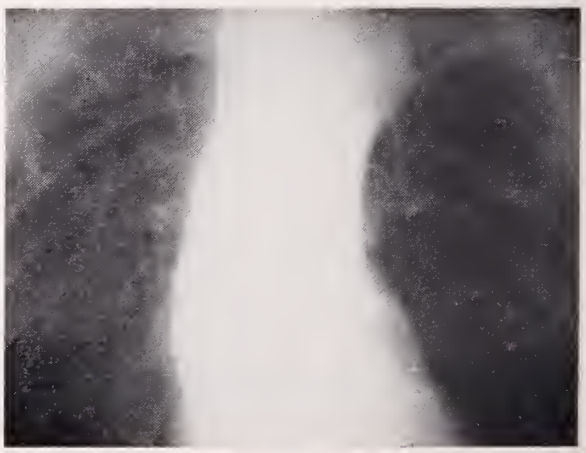


Figure 2

104th ANNUAL MEETING

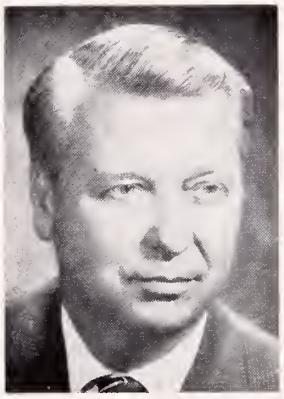
of the

West Virginia State Medical Association

The Greenbrier

AUGUST 19-21, 1971

PLAN NOW TO ATTEND



A message from . . .

The President

LIP SERVICE—OR DISSERVICE?

Of recent date, we have heard and seen, through the news media, severe criticism of our present system for providing medical services. Some of the people offering this lip service—or disservice—appear motivated by secondary factors: political values; "brownie" points toward lucrative positions in the event of ultimate socialization of American medicine; or a most sick reason centered about ventilation or mere exhibitionism. All are playing around with the health of a nation, and blatantly proclaiming a socialistic answer to the "crises in health care" and a "massively corrupt non-system."

Medicare is an experiment in socialization of medical care. This Social Security tax-supported system has created its own "crises in health care" for the aged. Physicians attempting to work within this system have had difficulty in providing service consistent with good medical practice, much less comprehensive health care. Hospitals, extended care facilities and the aged themselves have suffered unnecessary financial loss because of regulations promulgated in a desperate attempt to control so-called high costs, over-utilization and abuse. The failure of the intermediary to follow the recommendations of physicians on utilization review committees required by the Social Security Administration for medical facility participation certainly justifies classification of this method of health care as a "non-system."

Let us hope the people, through their representatives in Congress, will work toward a solution of the problem of health services for the poor, those in the ghettos and residents of sparsely populated rural areas *through the present system* before blindly switching to an unproven, problem-ridden, socialistic "non-system" financed by an inequitable and ever-increasing Social Security tax.

George R. Callender Jr. M.D.

George R. Callender, Jr., M. D., *President*

THE WEST VIRGINIA MEDICAL JOURNAL

Official Organ of the West Virginia State Medical Association

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EDITORIALS

THE INTELLIGENCE OF THE FIRST-BORN

It is of interest to physicians that there is considerable psychologic evidence that the intelligence of the first-born is in many instances superior to that of other siblings. This matter has been ably reviewed rather recently by Nathaniel Weyl (Perspective in Biology and Medicines, Chicago 1968). It is possible that the effect of the sacrifice of the first-born in the Mediterranean area for several centuries before the birth of Christ may have some bearing on the subject.

It is known that in the ancient city of Carthage the first-born was often sacrificed, principally for religious purposes. In fact in the earlier phases of the Mediterranean civilizations human sacrifice was fairly general. Later this practice was virtually abandoned in most areas, except in the Phoenician cities. Weyl suggests that it is possible that two aspects of Punic infant sacrifice may have adversely affected the innate mental ability of the population. The first one is that the toll primarily was from the upper classes, which presumably contained the most intelligent people, and the second is that primarily the first-born was sacrificed.

It may be significant that the Carthaginians left no architecture worthy of note, and did not enrich literature, philosophy or science with anything of consequence. Unfortunately it is difficult to prove that the sacrifice of the first-born accounts for the lack of such evidence of culture. Be that as it may, it is possible that there is some connection with this fact and the sacrifice of the first-born for several centuries.

If we turn to relatively recent time, figures are available which indicate fairly clearly that the first-born have a superior intelligence compared to other siblings. A study of 235 Rhodes scholars from two-child families shows that 61.3 per cent were first-born. An analysis of *Who's Who in America* produces a figure of 64 per cent. Considerable data may also be presented from among relatively young people. On the Santa Barbara (California) campus a study of 1,817 college students from two-child families showed that of those who excelled 63 per cent were first-born. In the scholastically more exacting colleges the superiority of the first-born seems to be much higher than in those colleges or universities which admit students with somewhat lower scholastic standing. At Reed College (Portland, Oregon), for example, 66 per cent of a sample were first-born and at Yale 61 per cent, while at the University of Minnesota, a great middlewestern university, the figure was decidedly less, approximately 50 per cent.

From the above figures the inference perhaps may be drawn that the advantage of the first-born tends to be larger in psychometric intelligence (that is, a measurement of the duration and force of mental operations). The entire subject needs further study and probably a fresh approach. It is truly an intriguing concept, and one which stirs the imagination.

The cause or causes of the apparent mental superiority of the first-born are not understood, and it is not known whether the principal cause is heredity or environment. It is appreciated that the first-born presumably receives more attention from his parents, but it is doubtful whether this is an important factor. From the standpoint of embryological development one suggestion might be made which the author of this editorial has not seen mentioned. It seems possible that the placenta which nourishes the first-born is in many instances more adequate than subsequent placentae, that is, the scarring of the placental site could result in a decrease of vasculization in subsequent placentae. Space does not permit an extensive review of the entire matter, but prevailing evidence favors the view that heredity is significantly more important than the environment.

If it is true that the first-born have a superior intelligence, those of us who are not first-born must not feel too discouraged. In the first place we are not responsible for the order of our birth, and secondly it is difficult to measure intelligence. It is to be remembered also that many men of great mental stature were not first-born; for example, Benjamin Franklin had a number of preceding siblings. So far as achievement is concerned, motivation, hard work and personality, all difficult to measure, play a very important part in the life of an individual. And in the final analysis, it is a comforting thought that few men use fully the intelligence with which they are endowed, which allows the rest of us, who perhaps may be less ably endowed, a chance to make our mark in life.

THE HIGH COST OF IMMORTALITY

It isn't exactly true that we have immortality within our grasp. It is true, however, that every time death is driven back a step or two, we move in the direction of immortality. Indeed, death has been sent reeling and presently seems to stand vulnerable to the broadsword of medical research.

The ethical, moral, philosophical and even economic consequences of this imminent development are awesome. For some time physicians have been faced with the twin ethical and moral questions of how long we should keep a vegetating humanoid alive. The Church has helped to a degree—we are not morally required to employ heroic measures to prolong life in hopeless circumstances. It remains for us to determine what is hopeless and what is heroic. But what yesterday was hopeless is today not quite so hopeless and what yesterday was heroic is today commonplace. Not too long ago a cardiac arrest successfully dealt with made headlines; today, it causes barely a ripple in the ordinary routine of any busy general hospital. The medically unsophisticated might still be impressed and awed by intravenous fluid administration but in all likelihood it is an unusual patient who manages to depart the hospital without the experience of having been "fed through my veins."

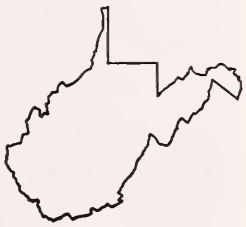
It has been relatively easy to make the decision to stop the IV's and the oxygen on someone hopelessly brain-damaged or cachetic and in agony with terminal cancer. A more difficult decision is which patient will have the available heart or kidney transplant or perhaps the artificial heart or the new dialysis machine. We will shortly have the technical capability of outfitting some human with a new set of plastic blood vessels, an artificial heart, handy portable renal dialysis machine and portable pulmonary blood oxygenator. Living might be cumbersome with such impedimenta but it will also very likely have possibilities of being lengthy.

There can be no argument that this will be a very expensive existence. The question of who will pay the medical expenses is an intriguing one. Will it be an H.M.O.? Medicare? A National Health Insurance Plan? What person or what committee will finally decree that it is just too expensive to keep this person alive? And what shall be the cutoff point medically and/or fiscally?

The point to be made is that as immortality is approached, medical costs tend toward infinity. Health planners along with Congress are struggling with facts, figures, actuarial tables, computers and, one might think, even crystal balls to establish projected costs for the various health plans. The truth of the matter is that if medicine is to be practiced to the fullest extent of its possibilities, there can be no cost limitations and no ceiling for total anticipated expenditures under any health plan.

(Continued on Page 198)

GENERAL NEWS



Program Completed for Annual Meeting At The Greenbrier, Aug. 19-21

The scientific program has been completed for the 104th Annual Meeting of the West Virginia State Medical Association which will be held at The Greenbrier in White Sulphur Springs, August 19-21.

Jay M. Arena, M. D.

Dr. Clark K. Sleeth of Morgantown, Chairman of the Program Committee, announced that Dr. Jay M. Arena, a native of Clarksburg and currently serving as Professor of Pediatrics and Director of the Poison Control Center at the Duke University School of Medicine, had accepted an invitation to speak at the second general scientific session on Friday morning, August 20. His subject will be "Useful Antidotes in Poisonings."

Jay M. Arena, M. D.

Doctor Arena was educated in the public schools of Harrison County and attended the two-year School of Medicine at West Virginia University. He received his M. D. degree in 1932 from Duke University School of Medicine and interned at Strong Memorial Hospital in Rochester, New York, and Johns Hopkins Hospital in Baltimore. He served his residency at Duke Hospital.

He served as an instructor in pediatrics at Vanderbilt University School of Medicine before joining the faculty at Duke in 1937. He has been at Duke since that time and was appointed to his present position in 1956.

Doctor Arena is currently serving as President Elect of the American Academy of Pediatrics and is Past President of the American Association of Poison Control Centers. He also is a member of Phi Beta Kappa and Alpha Omega Alpha.

He is the author of six textbooks and more than 175 scientific articles published in scientific journals. He serves on the editorial boards of six professional journals.

First General Scientific Session

It was previously announced that Dr. Curtis P. Artz will serve as Moderator for a "Symposium on Cancer" at the first general scientific session on Thursday, August 19. Doctor Artz is Professor and Chairman of the Department of Surgery at the Medical University of South Carolina. Other participants will be as follows:

Dr. Walter Lawrence, Professor of Surgery and Director of Cancer Clinic, Medical College of Virginia; and the following members of the South Carolina faculty: Drs. Paul H. O'Brien, Associate Professor of Surgery and Director of the Cancer Clinic; Keene M. Wallace, Professor of Radiology and Chairman of the Division of Radiotherapy; and H. Biemann Othersen, Associate Professor of Surgery and Chairman of the Division of Pediatric Surgery.

Second General Scientific Session

Joining Doctor Arena as speakers at the second general scientific session will be the following:

Dr. Jack C. Willke and his wife Barbara H. Willke, R. N., of Cincinnati, who will present a program on "The Physician's Role in Sex Education."

Dr. R. R. Hannas, Jr., of Kansas City, Missouri, who will present a paper on "Emergency Department: New Field of Practice."

Third General Scientific Session

Members of the faculty of the West Virginia University School of Medicine will participate in a Symposium at the third general scientific session on Saturday morning, August 21. The speakers and their subjects will be published in the August issue of *The Journal.*

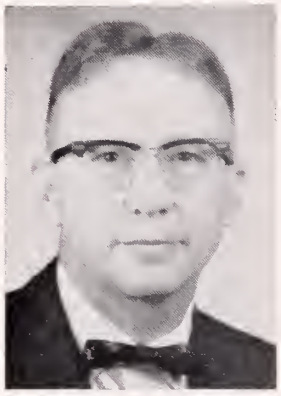
Business Sessions

Dr. Wesley W. Hall of Reno, Nevada, President of the American Medical Association, will be the speaker at the first session of the House of Delegates on Wednesday afternoon, August 18. The pre-convention meeting of the Council will be held that morning. Dr. George R. Callender, Jr., of Charleston, President of the State Medical Association, will deliver his Presidential Address at the second and final session of the House of Delegates on Saturday afternoon. Officers for the coming year also will be installed at that time.

The complete program for the Annual Meeting will be published in the August issue of *The Journal.*

Pennsylvania Society Honors Morgantown Physician

Ralph W. Ryan, M. D., M. S. in Ophthalmology, of Morgantown, was cited for distinguished service by the Pennsylvania Academy of Ophthalmology and Otolaryngology at its 27th Annual Scientific Session late in May.



Ralph W. Ryan, M. D.

Doctor Ryan's award included a plaque citing his untiring, unselfish and prodigious efforts in organizing a groundswell for support from the Lions Clubs of America which was largely responsible for the legislative victory for the bill which established the National Eye Institute within the National Institutes of Health in Washington, D. C. Doctor Ryan was one of those invited to ceremonies in which the bill was signed into effect by President Lyndon B. Johnson.

Doctor Ryan is Vice President of Social and Economic Affairs of the American Association of Ophthalmology, and a Past President of the West Virginia Academy of Ophthalmology and Otolaryngology. An authority on industrial eye research. Doctor Ryan was instrumental in organizing the Eye Branch of the National Institute of Neurological Diseases and Blindness, and headed the Branch from 1953 to 1955. During this period, he conducted significant research and reported on a successful method for treating uveitis, and on the relationships of specific viruses to what is called "pink eye."

SAMA Receives $125,000 Grant For Work in Appalachia

The Appalachian Regional Commission has approved a $125,000 grant for the Student American Medical Association for utilizing medical students in health projects in the Appalachian Region.

A Commission spokesman said in Washington, D. C., that 64 medical students, all from medical schools located in Appalachian states, would participate in the summer program. The spokesman added that most of the students would be in their second and third year of study.

West Virginia is among four Appalachian states to be involved in the program. Others will be South Carolina, Virginia, and Tennessee. This is the third year for the program.

The medical students will work with local physicians in many "hollow" communities throughout Appalachian sections of the four states. They also will work as health care teams, and will coordinate many of their efforts with county health departments. Some will do hospital work in family practice-type arrangements, the Commission spokesman said.

Health Services Grant Sought For Clay County

A new grant proposal designed to help residents of Clay County obtain badly needed health services has been developed by a number of state and local agency representatives.

Since the retirement of Dr. A. A. Smith last October, Clay has been without a resident physician. The county also is without a dentist or a pharmacist.

According to the 1970 census, Clay has a population of 9,330 persons and the nearest physician's office is in Clendenin, Kanawha County, some 20 miles from the county seat, Clay. Residents have not been successful in recruiting health personnel because of the remoteness and mountainous terrain of the county.

The new project for which funding is sought would form a non-profit public corporation to employ a doctor, a dentist, and a pharmacist to provide the health services needed by the residents of Clay County. The corporation would set up a reserve fund in the operating budget so that a guaranteed net income for the providers could be assured.

The county has raised $22,305 for in-kind matching funds and is looking for $66,827 from a Federal source.

Agencies and organizations active in preparing the project proposal have included the State Health Department; the West Virginia Regional Medical Program; State and Regional Comprehensive Health Planning staffs; the Clay County Development Corporation's Health Committee, and representatives of the Appalachian Regional Commission.

Davis and Elkins Alumni Honor Dr. Hubert T. Marshall

Dr. Hubert T. Marshall of Morgantown, a member of the Board of Trustees at Davis and Elkins College for 11 years, received the Alumni Distinguished Service Award at the June 5 annual Alumni-Graduate Banquet in Benedum Hall in Elkins.

Doctor Marshall is a native of Mingo in Randolph County. He attended Davis and Elkins for two years before transferring to the University of Louisville, where he received an M. D. degree in 1932.

From 1951 until his retirement in 1970, Doctor Marshall was associated with the United Mine Workers of America, serving for five years as Assistant Area Medical Administrator and for 18 years as Area Medical Administrator. After retirement, he served as assistant to the Executive Medical Officer of the UMW Welfare and Retirement Fund until July of last year.

Doctor Marshall first became a member of the Davis and Elkins Board of Trustees in 1959. With the exception of one year, he has continued as a member, and currently serves as Chairman of the Student Affairs Committee. Dr. Gordon E. Hermanson, President of the College, made the alumni award presentation.

Spring Meeting of the Council In Charleston on May 23

The Spring Meeting of the Council was held at Holiday Inn No. 1 in Charleston on Sunday, May 23, with the Chairman, Dr. Maynard P. Pride of Morgantown, presiding.

Dr. C. A. Hoffman, West Virginia's candidate for President Elect of the American Medical Association, was present at the meeting and expressed sincere thanks for the tremendous support he had received from his colleagues in West Virginia.

Other officers of the Association as well as the AMA delegates and alternates discussed Doctor Hoffman's candidacy and made final plans for the wrap up of the campaign at the AMA Annual Meeting in Atlantic City in June.

'Open Forum' at The Greenbrier

Dr. George R. Callender, Jr., the President, reminded members of the Council that an "Open Forum" type of session would be held during the 104th Annual Meeting at The Greenbrier. The session will be held on Thursday afternoon, August 19.

Doctor Callender emphasized that the "Open Forum" had been scheduled to give all physicians present at the meeting ample opportunity to discuss various problems affecting the profession. He urged all officers and members of the Council to attend.

Election of Honorary Members

The following physicians were elected to honorary life-time membership in the West Virginia State Medical Association:

Name	*Address*	*Society*
Boyd F. Brown	Huntington	Cabell
Marshall J. Thomas	Huntington	Cabell
Clint W. Stallard	Montgomery	Fayette
Frank V. Langfitt	Clarksburg	Harrison
J. Preston Lilly	Charleston	Kanawha
A. A. Smith	Clay	Kanawha
Sherl J. Winter	Beckley	Raleigh

Report of Medical Economics Committee

Dr. Worthy W. McKinney, Chairman of the Medical Economics Committee, said his Committee was still working with officers of the Vocational Rehabilitation Division in an effort to bring the fees paid by the Division more in line with those paid by other state agencies.

He said officers of the various specialty sections had been requested to supply information concerning usual, customary and reasonable charges in order to be able to compile same prior to future meetings with officials of the various agencies.

Doctor McKinney also said that he and several other officers of the Association plan to meet in Parkersburg on July 25 with the administrators of the Medicare and CHAMPUS programs.

Contribution to Scholarship Fund

It was announced that the Medical Arts Supply Company of Huntington contributed $500 to the Charles Lively Memorial Scholarship Fund. It was pointed out that this was the 13th consecutive year the Company had made a contribution in this amount.

Dr. C. A. (Carl) Hoffman of Huntington, (left) discusses his candidacy for President-Elect of the American Medical Association with Dr. Maynard P. Pride of Morgantown at the May 23 meeting of the West Virginia State Medical Association's Council in Charleston. Both Doctor Hoffman and Doctor Pride are Past Presidents of the State Medical Association, with Doctor Pride currently serving as Chairman of the Council.

Voluntary Self-Audit Service

The Council heard a progress report on the Voluntary Office Self-Audit Service sponsored by the Medical Association and the West Virginia Regional Medical Program as a new educational exercise to which physicians can turn as they constantly strive to improve patient care.

The Service will enable physicians who elect to participate to turn to peers of their choice for review of any aspects of their practice they desire. The physicians will choose the criteria on which an audit of their office records will be based.

Despite a cutback in the 100-per cent Federal funds which support the Service, opportunities to participate will be offered this year to physicians in four areas of the state centered about Parkersburg, Beckley, Huntington and Bluefield-Princeton.

Indoctrination of physicians who have agreed to serve as peers, after nomination by their various specialty groups, is continuing. The first contacts were made in late May and early June with other physicians, on an individual basis, to outline Service goals and details—and to ascertain their interest in participating. By June 1, some audits were underway.

The following members of the Council were present: Dr. Maynard P. Pride of Morgantown, Chairman; Dr. George R. Callender, Jr., of Charleston,

President; Dr. Harry S. Weeks, Jr., of Wheeling, President Elect; Dr. Worthy W. McKinney of Beckley, Vice President; Dr. Kenneth G. MacDonald of Charleston, Treasurer; Dr. Richard W. Corbitt of Parkersburg, Councilor at Large; Dr. Richard V. Lynch, Jr., of Morgantown, Junior Councilor; and Drs. Stephen D. Ward of Wheeling; Carl A. Liebig of Keyser; A. Kyle Bush of Philippi; J. D. H. Wilson of Clarksburg; Joseph B. Reed of Buckhannon; Joseph A. Smith of Dunbar; A. Thomas McCoy of Charleston; Richard G. Starr of Beckley; John J. Mahood of Bluefield; and Thomas P. Long of Man.

The meeting also was attended by Dr. C. A. Hoffman of Huntington, AMA Secretary-Treasurer; Dr. Frank J. Holroyd of Princeton, AMA Delegate; Dr. Richard E. Flood of Weirton, AMA Delegate; Dr. Thomas G. Reed of Charleston, AMA Alternate; Dr. Dr. A. C. Esposito of Huntington, AMA Alternate; Dr. George F. Evans of Clarksburg, Editor of *The Journal;* Mr. William H. Lively of Charleston, Executive Secretary; and Mr. Charles R. Lewis of Charleston, Executive Assistant.

Doctor Pfister New ACP Member

Dr. Alfred K. Pfister of Charleston has been granted membership in the American College of Physicians. The 56-year-old international medical specialty society is among leading professional organizations in providing continuing medical education opportunities for its 16,000 members.

Elkins Surgeon New Diplomate

Dr. Ali A. Maknoon, an orthopedic surgeon at the Memorial General Hospital, Golden Clinic and Medical Center in Elkins, has been named a Diplomate of the American Board of Orthopaedic Surgery.

'Open Forum' Scheduled During 104th Annual Meeting

One of the features of the 104th Annual Meeting at The Greenbrier will be an "Open Forum" type of session on Thursday afternoon, August 19.

Physicians will have an opportunity at this session to discuss various problems affecting the profession—such as peer review, malpractice, third-party programs, health manpower, foundations, the practicing physicians' relations with the WVU Medical Center, etc.

Dr. George R. Callender, Jr., the President, will serve as Moderator and other physicians who have had experience with the problems listed above will serve as a resource panel. Doctor Callender has emphasized that all physicians present at the meeting will be given an ample opportunity to express their views on any given subject.

National Use, Cost of Drugs Detailed in New Study

Between $3 billion and $4 billion annually is spent for prescribed drugs by consumers in the United States. That is among conclusions in a recently published study, "Health Insurance and Prescription Drugs," distributed by the Health Insurance Association of America.

On the drug side, the study probes into dimensions of the drug industry, national use of drugs and medicines both in and out of hospitals, and drug and medicine costs.

On the insurance side, it includes statistics on private health insurance coverages for prescribed drugs; financing of these drugs under public programs; and control over use, cost and quality of drugs.

According to the study, "the consumption of prescription drugs and medicines has been increasing rapidly over the years and there is every indication that this trend will continue." The study adds:

"The future should witness an increase in persons with insurance or prepayment protection against the costs of out-of-hospital prescription drugs.

"Underlying all future growth is the matter of the degree to which the public will demand such protection and indicate a willingness to pay for it."

The 109-page report was prepared by J. F. Follmann, Jr., Vice President of Information and Research at the HIAA, and Donald D. Jones, the Association's Assistant Director of Research.

Copies are available at $100 each. They can be obtained by contacting the Health Insurance Association of America, 750 Third Avenue, New York, New York 10017.

Justice Department Institutes "Pep Pill" Crackdown

The Justice Department has cracked down on the widespread abuse of "pep pills" by proposing the reclassification of amphetamines and methamphetamines so as to require that they fall in the category of non-refillable prescriptions.

The action would regulate amphetamines and methamphetamines as narcotic substances such as morphine, codine, and opium as they carry a potential for "severe psychological dependence" with "serious danger" to abusers.

Manufacturing quotas geared to estimated legitimate use and the filing by manufacturers of order forms would be required. However, at least one major manufacturer has endorsed the proposal.

Some lawmakers have complained that Justice did not go far enough, and that the order should have included phenmetrazine (Preludin) and methylphenidate (Ritalin).

Postgraduate Course on Cardiology In Morgantown, Oct. 7-9

The American College of Cardiology and the West Virginia University School of Medicine will sponsor a three-day postgraduate course on "Diagnostic and Therapeutic Approach to Cardiac Arrhythmias" which will be held at the WVU Medical Center, October 7-9.

Dr. Edward K. Chung, Professor of Medicine and Director of the Electrocardiographic Laboratory at WVU, is the program director. He announced that members of the WVU faculty and several physicians from other universities will be members of the faculty.

Enrollment for the course is limited to 50 and advance registration is requested. Registration fee for the course is $75 for members of the American College of Cardiology and $125 for non-members.

HEW's New Assistant Secretary Endorsed by AMA

The American Medical Association "enthusiastically endorses" the appointment of Merlin K. Duval, M. D., by President Nixon as Assistant Secretary of Health and Scientific Affairs, U. S. Department of Health, Education and Welfare, AMA President Walter Bornemeier, M. D., said.

Dean of the University of Arizona College of Medicine and former Professor of Surgery, Doctor Duval, 48, succeeds Roger Egeberg, M. D., who remains as a Consultant on Health at the White House and as a Special Assistant to the HEW Secretary.

Doctor Duval is a member of the AMA's Committee on Undergraduate Medical Education and the liaison Committee on Medical Education. A graduate of Dartmouth College and Cornell University Medical School (1946), he is a Board-certified surgeon.

Supplemental Appropriation Includes Cancer Research Funds

President Nixon has signed into law a $6.9-billion supplemental appropriation bill containing an additional $100 million for cancer research. The "cancer cure" program would have an independently budgeted research unit within the National Institute of Health with a Director reporting directly to the President.

"As I have said before, the time has come in America when the same kind of concentrated effort that split the atom and took man to the moon should be turned toward conquering this dread disease," Mr. Nixon said in a statement.

Elliot Richardson, U. S. Secretary of Health, Education and Welfare, commenting on the President's action, remarked:

"I might just say briefly that what has been recognized here is the need for, and the opportunity for, a degree of the kind of managerial focus that has been effective in marshaling resources in other fields."

"There is a distinction, of course, as the President pointed out in his health message and elsewhere, between this situation and the moon shot in the sense that there is a need and an opportunity for the development of new knowledge.

"But at the same time . . . there is an opportunity also for the exercise of a central directive authority, particularly in those aspects of the work that can be targeted and handled by contract, rather than grants with individual scientists."

Change of Address

Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. Notices should be mailed to Box 1031, Charleston, West Virginia 25324.

The candidacy of Dr. C. A. (Carl) Hoffman of Huntington for President-Elect of the American Medical Association was a prime topic for discussion by officers of the West Virginia State Medical Association when they assembled in Charleston May 22 and 23 for meetings of the Executive Committee and the Association's Council. At left, Dr. Worthy W. McKinney of Beckley (left) and Dr. Harry S. Weeks, Jr., of Wheeling, Vice President and President-Elect, respectively, of the Association, review the list of AMA Delegates from around the nation who vote in the national organization's annual elections. In the right photo, Dr. Richard V. Lynch, Jr., of Morgantown (left), a member of the Executive Committee, and Drs. Richard E. Flood of Weirton and Frank J. Holroyd of Princeton, the Association's two Delegates to the AMA, also review the campaign picture.

Continuing Medical Education: What Do You Think?

The American Medical Association's Board of Trustees has suggested that participation in continuing education should become one of the requisites for continuing membership in state medical associations. Historically, it has been voluntary and some believe sheuld remain so.

George James Hill, II, M. D., Denver, the first recipient of the Physician's Recognition Award, believes that "continuing medical education should be encouraged in every way possible and the Award is a meaningful way to encourage the voluntary participation of physicians in diverse learning experiences." Since graduation from Harvard in 1957, Doctor Hill, Assistant Professor of Surgery at the University of Colorado, has written 30 scientific reports and the book, "Leprosy in Five Young Men," as well as pursuing his major medical interests of general surgery and cancer research.

Robert Hope, M. D., Medical Director of St. Vincent's Hospital in Los Angeles, has regularly participated in continuing medical education since earning his medical degree in 1928. As for compulsory education, he dismisses the proposal with, "You can lead a horse to water but you can't make him drink."

Robert Evans, M. D., is so enthusiastic about the Physician's Recognition Award that he interested the entire York, Pennsylvania, Hospital staff in applying for it. (All were eligible by virtue of courses they'd taken, scientific papers published and clinical meetings attended. It was just a matter of submitting a record of these activities to the AMA Department of Continuing Education for review.)

F. Norman Vickers, M. D., encouraged the Escambia County, Florida, Medical Society to adopt the Award program as a local project. "We saw this as an opportunity to show that Pensacola has a striving for medical excellence."

Maynard Shapiro, M. D., Chicago, immediate Past President of the American Academy of General Practice, plans to qualify for the Physician's Recognition Award every three years. "The knowledge explosion makes it mandatory that continuing education be an integral part of every physician's schedule," he has explained.

Motion picture producer, author, Northwestern Medical School Professor and American College of Surgeons Assistant Director Harold A. Zintel, M. D., Chicago, actively participates in AMA and specialty medical society meetings to keep apprised of new developments in medicine. While he's opposed to compulsory continuing education ("with institution of each new restriction, we all lose some of our freedom"), he's a zealot for voluntary study, agreeing with his colleagues that "one never graduates in medicine."

"Every physician's career is built on three great foundations: clinical excellence, teaching and research," according to Capt. Frederick E. Jackson, M. C., USN, of Camp Pendleton California. Since graduation from medical school in 1954, he has published 50 scientific papers on neurological research and development, attended a great number of education courses and qualified for the PRA.

Ninety-five medical institutions and organizations have been formally accredited for continuing medical education by the AMA Council of Medical Education. The current listing of courses includes 2,319 offered in 41 states, the District of Columbia and Puerto Rico. The courses are listed annually in the Journal of the American Medical Association. The next listing will be in the August 2, 1971, issue of JAMA.

THE HIGH COST OF IMMORTALITY

(Continued from Page 192)

If unlimited health care is to be given, health care cost will be unlimited. The type of health plan under which unlimited health care might be given would appear to be of very little consequence, for unlimited care would cost an unlimited amount of work, or time, or skill, or money under any plan.

These are not easy matters to contemplate or discuss. Our technical skills are creating social and moral problems as by-products of our medical successes. These problems must be dealt with by society as a whole rather than by the medical profession alone.

The conclusion appears simple enough: if medical costs are to be limited, medical care must be limited. Immortality comes dear. We probably cannot afford it. We will have to settle for just a bit of it.

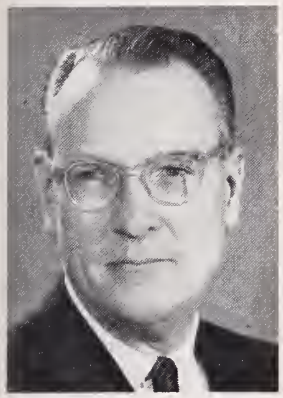
Looking Back 10 Years . . .

Dr. Edward L. Compere of Chicago (second from left) was a guest speaker at the Annual Meeting of the West Virginia State Medical Association in 1961. With him are Dr. George R. Callender, Jr., of Charleston (left), now President of the State Medical Association; and Dr. and Mrs. Athey R. Lutz of Parkersburg.

Education Geared to Practice Urged for Physicians

What, from the standpoint of the practicing physician, is the thing most needed today in medical education?

The second State Medical Education Planning Conference held in Charleston April 24-25 seemed to provide this general answer to that question:



C. H. William Ruhe, M. D.

Programs geared to what the physicians, themselves, determine that they need—and conducted out in the communities where arrangements for attendance can be worked into busy day-by-day schedules.

This was among key observations, and recommendations, emerging from the Conference that were ready for study by the West Virginia State Medical Association's Committee on Medical Education and Hospitals at a June 13 meeting in Charleston.

Dr. Robert O. Strauch, Medical Director at Ohio Valley General Hospital in Wheeling, observed during a general discussion period at the Conference that "education should be molded to the needs of the practicing physician . . . We should ask the practicing physician what he needs, and then do what we can to help."

Doctor Strauch also emphasized that "when we have gone to meetings where they had subjects which were pertinent to our practice, we have gone more and more—but when those meetings have gotten into subjects more abstract and entirely without current application, we have quit going."

Dean Frank W. McKee of West Virginia University's School of Medicine told the Conference that he regards "bedside teaching with the physician, involving his own patients," as the real essence of continuing education.

This doesn't take a great deal of the physician's time, Doctor McKee continued, and yet it provides a physician with an opportunity to learn much in an atmosphere in which he is more comfortable than he is "in coming into a large medical center with people in white coats."

"I think this is the kind of thing we need to work toward in bringing medical education to physicians in areas of activity in which they feel they might have become somewhat rusty," Doctor McKee said. "We all need this, regardless of what kind of patients we see. We need somebody, in effect, to sort of bring us back to where we were when we got out of medical school. Another key thing, of course, is to have the kind of continuing education that is really applicable to the kind of practice in which an individual is engaged."

Dr. C. H. William Ruhe, Director of Medical Education for the American Medical Association, also touched on this same general theme in his remarks at the Conference.

"I think what we really need for more effective continuing education is something that's built into daily activities of the physician in such a way that he isn't faced with having demands on his time," Doctor Ruhe explained. He also stressed:

"This can be carried out in the community hospital. It can be made a part of the regular process of his practice and participation in his hospital activities. . . . I think that, when this can be done on a regular basis, education and practice will really be interlaced to the point where they become almost inseparable . . ."

Doctors McMullen, Bateman Honored by Bethany

Dr. James Park McMullen of Wellsburg and Dr. Mildred Mitchell Bateman of Charleston received honorary Doctor of Science and Doctor of Public Administration degrees, respectively, at Bethany College's 130th annual Commencement on May 31.

J. P. McMullen, M. D.

Mildred M. Bateman, M. D.

Doctor McMullen, a specialist in internal medicine and cardiovascular diseases, was President of the West Virginia State Medical Association in 1955. He received his A. B. degree from Bethany and his medical degree from the University of Pittsburgh. In 1958, he was awarded the Bethany Alumni Association's Distinguished Achievement Award.

Doctor Bateman, West Virginia's Director of Mental Health, holds an undergraduate degree from Johnson C. Smith University in Charlotte, North Carolina, and a medical degree from the Woman's Medical College of Pennsylvania in Philadelphia.

A third honorary degree, as Doctor of Divinity, was granted by Bethany to Dr. Harry Baker Adams, Associate Dean of the Yale University Divinity School in New Haven, Connecticut.

Hormone Offers New Hope In Anemia Treatment

A hormone called erythropoietin, which stimulates red blood cell formation and could result in an important prospective treatment for anemia, has been isolated from anemic sheep, according to the National Society for Medical Research.

Dr. Eugene Goldwasser, a Professor of Biochemistry at the Pritzker School of Medicine, Chicago, is credited with isolating the hormone.

"The existence of erythropoietin has been known for at least 50 years," Doctor Goldwasser said, "but it is present in such minute traces that, until now, we haven't been able to isolate it."

The hormone must be in a pure state before researchers can study its chemical nature, use it in clinical trials to help patients, or look for other sources, perhaps artificial in nature.

The difficulty of the undertaking is clear when one considers that obtaining about 200 millionths of a gram (seven millionths of an ounce) of the hormone required blood from 150 anemic sheep.

To produce enough of the pure material to treat five patients with anemia will cost some $75,000, Doctor Goldwasser estimated. This means that, even if it should prove an effective treatment, it will be a long time before enough is available for all those who could use it now.

The beginning of this modern investigation occurred around 1906 when a Frenchman, P. Carnot, first suggested the existence of erythropoietin. During the period from 1906 to 1955, other scientists deminstrated that, although they couldn't isolate it, the hormone was there and that it acted specifically to produce red blood cells.

It has been known for some time that some patients who suffer from anemia produce large amounts of erythropoietin, but it is excreted in their urine. Not everyone with severe anemia, however, produces the hormone. Patients with kidney disease are a good example of the second category and it is likely that these are the people who will receive the first clinical doses of erythropoietin. In this way, their condition is analogous to that of the diabetic patient who does not produce insulin in his body, but who can live normally by taking insulin from an outside source.

Asked to speculate on the possible ramifications of his discovery, Doctor Goldwasser said he sees two independent, but related, aspects—clinical and research uses. "A large number of people do suffer from the type of anemia that would need erythropoietin and physicians say the number is increasing," he said, "so using this as a treatment really is worth the effort. From my own point of view, this is an unparalleled tool, existing nowhere in biology. Here is a material which specifically directs the path of a tissue, telling it the future it will have."

"The mechanism by which one cell is instructed to make hemoglobin while others around it are not so instructed is fascinating. We now have two well-defined end points—with pure erythropoietin at one end and the cell containing hemoglobin at the other. What we want to know next is what happens in between," he said.

Congressional Committee Approves Three-Part Health Bill

The U. S. House of Representatives' Committee on Interstate and Foreign Commerce has approved a three-part health bill designed to meet the national shortage of medical personnel by 1978.

The proposed legislation would authorize an estimated $3.3 billion in aid to health profession students and their schools in the next three years, and provide the facilities and programs to close the manpower shortages in the health professions within seven years.

The nation's financially beleaguered medical schools would receive $11,500 for the full-term cost of training each student, an action long urged by the American Medical Association. Saying that the measure was "long overdue," Congressman Paul Rogers, Democrat of Florida, Chairman of the Subcommittee on Health, predicts that the legislation will not only solve the shortage of health personnel by 1978, but will provide the necessary groundwork needed if Congress should approve some form of national health insurance.

Under the legislation, expected to pass the House in substantially the same form, each school would receive $2,500 per student per year for the first three years of training. The grant climbs to $4,000 for the final year. In order to encourage swifter training, three-year schools would receive the same total as four-year schools, but the final-year figure would be $6,500.

Each school must enroll an additional five per cent of students, or ten, whichever is the greater, to qualify for assistance. An extra $1,000 will be awarded schools for each student exceeding this total. The measure will also help establish at least five new medical colleges.

Additional authorizations would provide $270 million for health manpower initiative awards to establish health education centers, and $412 million for special project grants for programs in family medicine, physician assistant training, and others. The bill continues support for scholarship and student loans at increased levels.

Need a New Auto Emblem?

A supply of auto emblems, bearing the insignia of the West Virginia State Medical Association, is kept on hand at all times at the headquarters offices in Charleston. The price of each emblem is $5.00 postpaid.

Council on Teaching Hospitals Elects New Officers

Mr. Deal H. Tompkins, President of Charleston General Hospital's Board of Trustees, began a two-year term July 1 as Chairman of the West Virginia Joint Council on Teaching Hospitals.

Mr. Tompkins has served as the Council's Vice Chairman, and he advanced automatically to the Chairmanship when the Council elected new officers at a June 3 meeting at the Holiday Inn in Parkersburg.

Dr. George M. Kellas, Director of Medical Education at Wheeling Hospital in Wheeling, was chosen as Vice Chairman, also for a two-year term. He has been a member of the Executive Committee.

Elected to the Executive Committee were Dr. David Z. Morgan of Morgantown, outgoing Council Chairman; and Mr. Charles L. Showalter of Charleston, Administrator of Charleston Memorial Hospital.

Both were chosen for one-year terms, with Mr. Showalter being reelected. Doctor Morgan also is Assistant Dean of the West Virginia University School of Medicine.

Mr. Charles R. Lewis, Executive Assistant in the West Virginia State Medical Association's offices in Charleston, will continue to serve as the Council's Secretary-Treasurer by Executive Committee appointment.

The Council accepted, as new Associate Members, the newly-formed United Hospital Center, Inc., of Clarksburg; and Memorial General Hospital Association of Elkins. United Hospital Center represents a consolidation of Union Protestant and St. Mary's Hospitals in Clarksburg. St. Mary's has been an Associate Member of the Council.

The Council devoted much of its discussions to means for broadening its efforts to make young physicians more aware of practice opportunities in West Virginia; and the increased role it should play in strengthening residency programs in the State.

Council members assured Dr. Frank W. McKee, Dean of WVU's School of Medicine, that they will stand ready to provide all possible assistance as new or revamped residency and other medical education programs are designed, particularly in the light of an end to all internship programs by 1975.

Dr. Roland Schmidt, Acting Assistant Dean for Curriculum at the WVU School of Medicine, reported to the Council on the first year of operation in the Selective Experience Program for fourth-year WVU medical students.

Under this program, the students are able to spend up to half of their final year away from Morgantown; and in training programs they select in community hospitals in the state, or in out-of-state university or university-affiliated centers.

Doctor Schmidt said that, among other things, students have indicated in their evaluations that they have found the quality of the learning experience in community hospitals to be at least equal to that at WVU.

Doctor Morgan said that the first annual review of medical education and related facilities at the Council's member hospitals soon would be set into motion; and that a fall conference will be scheduled in Morgantown for individual Selective Experience Program directors in the various community hospitals with their WVU counterparts.

New officers of the West Virginia Joint Council on Teaching Hospitals relax after their election at a Council meeting in Parkersburg on June 3. Beginning two-year terms, as of July 1, were Mr. Deal H. Tompkins (left) of Charleston and Dr. George M. Kellas of Wheeling (second from left), named Chairman and Vice Chairman, respectively. Also pictured are Dr. David Z. Morgan of Morgantown, the immediate Past Chairman, and Mr. Charles L. Showalter of Charleston, named to one-year Executive Committee terms. Mr. Charles R. Lewis of Charleston, Executive Assistant on the West Virginia State Medical Association's staff, is the Council's Secretary-Treasurer. Ex-officio Executive Committee members are Mr. William H. Lively and Mr. Bruce J. Carter, both of Charleston. Mr. Lively is Executive Secretary of the Medical Association, and Mr Carter is Executive Vice President of the West Virginia Hospital Association.

Twenty-seven persons attended the June 3 Council meeting. Represented along with the WVU medical school and the two new Associate Members were the West Virginia State Medical Association and the West Virginia Hospital Association, and these hospitals:

Charleston General; Charleston Memorial; Broaddus Hospital in Philippi; Veterans Administration Hospital in Clarksburg; St. Mary's in Huntington; University Hospital in Morgantown; and Ohio Valley General and Wheeling Hospitals, of Wheeling.

Chest Physicians Schedule Philadelphia Meeting

The American College of Chest Physicians (ACCP) will hold its Third Annual Fall Scientific Assembly (37th Annual Meeting) in Philadelphia October 24-28. All sessions will take place at the Sheraton Hotel, and the meeting theme will be "Respiratory and Cardiovascular Care, The Clinician's Challenge."

Some 65 papers on original clinical research will be chosen for presentation at the session from about 300 that were submitted. Peter M. Theodos, M. D., Philadelphia, is General Arrangements Chairman and Peter V. Moulder, M. D., Chicago, is Chairman of the Program Committee.

A copy of the advance program and information on hotel reservations and registration may be obtained from Alfred Soffer, M. D., Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 60611.

Health Insurance Speaker Lists Health Care Priorities

A leading health insurance spokesman has outlined a list of priorities to use in improving the nation's health care.

Walter H. Foody, Chairman of the Health Insurance Council, made the suggestions as keynote speaker of his group's recent conference on effective utilization of health care facilities and services held in Chicago.

He also made a series of suggestions aimed at the nation's health insurers which he said must be followed "if better health care is to be achieved . . . and a system to which every person has access is to evolve."

Mr. Foody, Senior Vice President of Continental Casualty with offices in Chicago, said both "public and private resources" would be needed to "institute national health insurance."

Then he provided these suggestions for activities in which private and public agencies could participate to create a better delivery system:

More medical schools and more federal, state and private aid to medical education.

Expanded training programs for health workers in new categories to provide supportive services.

Elimination of legal barriers to group practice, and group practice prepayments, as well as changes in licensing to have a more equitable distribution of health personnel.

A comprehensive health system providing to all people a full range of coordinated services covered under comprehensive health plan benefits.

Mr. Foody, talking directly to the health insurance delegates at the conference, then made the following observations "on what many of us in the health insurance business believe we need to focus in the immediate future:

We need to focus on greater availability and accessibility of preventive care, ambulatory care, and rehabilitative services.

We must increase health manpower and manpower productivity, and we believe this can be done through training and wider use of allied health personnel and through expanded federal grants and scholarship aid programs.

We must stress direct and immediate measures to control cost and quality, based on modern managerial techniques.

Greater responsibility and authority should be given to community and state health planning, along with increased community, state and federal funding.

We think a governmental body is needed to provide national health policy guidelines.

We need much greater emphasis on programs of community health education.

We firmly believe that the solutions to health cost financing require the combined efforts of government and private sectors, each playing an appropriate role.

The Health Insurance Council, supported by the nation's insurance companies, provides technical assistance on health insurance to the health care professions.

New Culture Medium Studied In Gonorrhea Detection

The ability to grow and isolate the gonococcus organism has long been the main source of detection of gonorrhea, Dr. N. H. Dyer, West Virginia's Health Director, has emphasized. The routine use of Thayer-Martin culture medium for this purpose is well established.

However, use of this medium is limited, since it does not adequately support the growth of *N. gonorrhoeae* in transit. When the Thayer-Martin culture medium is used, immediate incubation in an atmosphere of carbon dioxide is necessary for growth of the organism.

At a recent meeting of the Association of State and Territorial Public Health Laboratory Directors, a paper was presented entitled "Transgrow, a Medium for Transport and Growth of Neisseria, gonorrhoeae" by J. E. Martin, Jr., and A. Lester. Preliminary studies on the effectiveness of this medium have been conducted by the Venereal Disease Research Laboratory, Atlanta, Georgia, and other laboratories. These studies indicate that a high percentage of cultures positive on Thayer-Martin plates, incubated soon after inoculation, were also positive on Transgrow medium after 48-96 hours in transport to the laboratory.

Working within this framework, the State Hygienic Laboratory, in close cooperation with the Bureau of Venereal Disease Control and the Kanawha-Charleston Health Department, has conducted an evaluation of this newer culture medium. Between January and February, 1971, 200 specimens were collected on both media types by personnel from Kanawha-Charleston Health Department during their routine venereal disease clinics. All media, equipment and mailing containers were supplied by the Hygienic Laboratory. Instructions on proper specimen collection were given by laboratory personnel. Thayer-Martin plates were delivered to the Hygienic Laboratory by courier and Transgrow bottles were sent through regular mail service. Results of this study are as follows:

Total Parallel Examinations	200
Total Positive Thayer-Martin	20
Total Positive Transgrow	19
Total Negative Thayer-Martin	180
Total Negative Transgrow	181
Positive Thayer-Martin—Negative Transgrow	1
Positive Thayer-Martin—Unsatisfactory Transgrow	1
Positive Transgrow—Negative Thayer-Martin	1

(Continued on Page xxi)

New Association Members

Dr. R. G. Co, 1200 Harrison Avenue, Elkins (Tygart's Valley). Doctor Co, a native of the Philippines, was graduated in 1963 from Far Eastern University School of Medicine. He interned at Grace Hospital in Detroit and served a residency at Mt. Sinai Hospital Services—City Hospital Center, Elmhurst, New York. He previously was located in Newark, New Jersey and his specialty is internal medicine.

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Dr. Odd Aga, Green Bank (Greenbrier Valley). Doctor Aga, a native of Norway, received his medical degree in 1965 from the University of Freiburg in Germany. He interned and served residencies at hospitals in Norway and Germany. He was previously located in West Germany and is engaged in general practice.

* * * *

Dr. Betty Y. Agnir, VA Center, Martinsburg (Eastern Panhandle). Doctor Agnir, a native of the Philippines, was graduated in 1962 from the University of Santo Tomas School of Medicine. She interned at Charity Hospital in Manila and at a hospital in Lakewood, Ohio. She served residencies at Christ Hospital in Jersey City, New Jersey, and St. Joseph's Hospital in Paterson, New Jersey. Her specialty is anesthesiology.

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Dr. Prabhond Chinuntdet, 356½ Main Street, Madison (Boone). Doctor Chinuntdet, a native of Thailand, was graduated in 1959 from the Chulalongkorn University Medical School. He served residencies at Charleston Memorial Hospital and hospitals in Chicago and Cincinnati. His specialty is general surgery.

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Dr. T. M. Cometa, Jr., Summers County Hospital, Hinton (Summers). Doctor Cometa, a native of the Philippines, was graduated in 1962 from Manila Central University. He interned at hospitals in Manila and Trenton, New Jersey, and served a residency at Beckley Appalachian Regional Hospital. His specialty is general surgery.

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Dr. Hossein Yassini-Fard, 1130 National Road, Wheeling (Ohio). A native of Iran, Doctor Yassini-Fard was graduated in 1961 from the Teheran Medical Center. He interned at St. Paul Hospital in Saskatoon, Canada, and served residencies at that hospital and Wheeling Hospital. He is engaged in general practice.

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Dr. J. T. Godfrey, 415 Federal Street, Bluefield (Mercer). Doctor Godfrey, a native of McKinney, Texas, received his M. D. degree in 1940 from the University of Oklahoma School of Medicine. He interned at Sibley Hospital in Washington, D. C., and served a residency at the Iowa Mental Health Institute in Cherokee. He served as a Captain in the Medical Corps of the U. S. Army, 1941-46, and his specialty is psychiatry.

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Dr. Robert F. Gustke, 4315 Emerson Avenue, Parkersburg (Parkersburg Academy). Doctor Gustke, a native of Parkersburg, was graduated from West Virginia University and received his M. D. degree in 1964 from the WVU School of Medicine. He interned and served residencies at WVU Hospital and the University of Marquette Hospital. His specialty is internal medicine.

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Dr. Robert B. Harrison, 301 Medical Arts Building, Charleston (Kanawha). Doctor Harrison, a native of Greer, South Carolina, received his M. D. degree in 1963 from the Duke University School of Medicine. He interned at St. Anthony Hospital in Denver and served a residency at Norfolk General Hospital at Norfolk, Virginia. He served as a Lieutenant in the Medical Corps of the U. S. Navy, 1964-67, and previously served as an instructor in radiology at the University of Virginia School of Medicine.

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Dr. Jaime E. Lazaro, Huntington State Hospital, Huntington (Cabell). Doctor Lazaro, a native of the Philippines, was graduated in 1953 from Manila Central University. He interned at Ohio Valley Hospital in Steubenville and Ohio Valley General Hospital in Wheeling. He served residencies at St. Lawrence and Gowanda State hospitals in New York and his specialty is psychiatry.

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Dr. L. D. Mullins, 525 Bland Street, Bluefield (Mercer). Doctor Mullins, a native of Duty, Virginia, was graduated from Carson-Newman College and received his M. D. degree in 1958 from the University of Tennessee School of Medicine. He interned at Mid-State Baptist Hospital in Nashville and served residencies at that hospital and at Memorial Hospital in Charlotte, North Carolina. He previously was located at Baptist Hospital in Indonesia and his specialty is surgery.

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Dr. Caridad E. Sun Sanchez, 600 East McDonald Avenue, Man (Logan). A native of the Philippines, Doctor Sun Sanchez was graduated in 1962 from the Cebu College of Medicine. He interned at St. Peter's and Mercer Hospitals in New Jersey and served residencies at the De Paul and King's Daughters Children Hospital in Norfolk, Virginia. He was previously located in the Virgin Islands and is engaged in general practice.

AMA Begins Communication Effort

The American Medical Association has launched a special communications program in three national magazines and selected local media. Part of the effort will focus on better personal health care. Part will provide information on organized medicine's response to various national health care issues.

"The emphasis will be on education and information," Frank D. Campion, the AMA's Director of Communications, said. "We hope to make a positive, constructive contribution both to people's own personal health and to the growing public dialogue on national health care problems."

Chicago Foundation Provides Bronco Junction Grants

Asthmatic Children's Aid, a foundation with offices in Chicago, has provided grants totaling $8,000 for this year's Bronco Junction program for boys and girls suffering from asthma.

The eight-week camp period on a 176-acre Putnam County tract opened June 20 and will continue until August 15. Staff members reported June 13, with duties to continue until August 17.

Dr. Merle S. Scherr of Charleston, Medical Director for Allergy Rehabilitation Foundation, Inc., which operates the camp, said that $5,000 of the new grants will be used for scholarships for children referred to Bronco Junction from the Chicago area.

The remaining $3,000 will be used for research and medical supplies at Bronco Junction, a pioneer effort to provide total treatment and rehabilitation of asthmatic children in a normal summer camp environment.

This summer likewise brought inauguration at the camp of a camp counselors' course set up by Morris Harvey College, and providing three hours of credit. The course, entitled "Adolescent and Childhood Psychology," also represents an innovation in college and university circles.

U. S. Official Cites Conditions for HMO Success

U. S. Social Security Commissioner Robert Ball, in a recent address on the concept of Health Maintenance Organizations, listed six conditions that he considered essential to HMOs' success. The first condition, in Mr. Ball's estimation, is that "this way of practicing medicine must be made attractive to large numbers of physicians."

In elaborating on this point, Mr. Ball said:

"Successful organizations of any kind depend upon high staff morale. Thus, no health care system will work well that is not reasonably satisfactory to the key profession in that system. Physicians must be attracted to health maintenance organizations and they must feel good about what they are doing.

"High physician morale is by no means solely a matter of adequate compensation, although adequate compensation is important. The physician must be convinced of his ability to practice good medicine and to be generally free of bureaucratic constraint on professional judgment.

"Incidentally, it seems strange to me that the matter of physicians' likes and dislikes is so frequently overlooked by health care planners. We worry a lot about the morale of the armed forces, of school teachers and other government employees; in the health care system we'd better worry about the morale of the providers of care."

Medical Meetings

The following is a partial list of national, state and district medical meetings scheduled in the coming months.

1971

Aug. 19-21—104th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.
Aug. 23-26—Am. Hosp. Assn., Chicago.
Sept. 9-11—Am. Assn. of Ob.-Gyn., Hot Springs, Va.
Sept. 13-17—Int. Conf. on Coal Workers Pneumoconiosis, New York City.
Sept. 17-18—W. Va. Heart Assn., Clarksburg.
Sept. 20-24—Am. Acad. of Oph. and Otol., Las Vegas.
Sept. 21-23—Ky. Medical, Louisville.
Sept. 23—Rural Health Conference, Jackson's Mill.
Sept. 23-25—Central Assn., Ob.-Gyn., White Sulphur Springs.
Oct. 1-8—AAGP, Miami Beach.
Oct. 3-7—Pa. Medical, Pittsburgh.
Oct. 11-14—Ind. Medical, Indianapolis.
Oct. 14-17—Va. Medical, Arlington.
Oct. 16-21—Am. Acad. of Ped., Chicago.
Oct. 16-20—Am. Soc. of Anes., Atlanta.
Oct. 18-22—ACS, Atlantic City.
Oct. 24-28—Am. Col. of Chest Phys., Philadelphia.
Nov. 3-6—Am. Soc. of Cyt., Washington.
Nov. 9-16—Am. Heart Assn., Anaheim, Calif.
Nov. 28-Dec. 1—AMA Clinical, New Orleans.
Dec. 4-9—Am. Acad. of Derm., Chicago.
Dec. 5-7—Am. Acad. of Hema., San Francisco.

1972

Jan. 24-26—Soc. of Thoracic Surg., San Francisco.
Feb. 4-12—Am. Soc. of Clin. Path. & Col. of Am. Path., Atlanta.
Feb. 5-6—AMA Cong. on Med. Educ., Chicago.
March 1-5—Am. Col. of Cardiology, Chicago.
March 2-4—Central Surg. Assn., Chicago.
March 6-7—Int. Acad. of Path., Chicago.
March 27-30—Southeastern Surg. Cong., Washington.
April 3-8—Am. Col. of Rad., Bal Harbour, Fla.
April 13-18—Am. Derm. Assn., Dorado Beach, P. R.
April 16-20—Am. Assn. of Neu. Surg., Boston.
April 16-21—ACP, Atlantic City.
April 17-20—Am. Col. of Ob. & Gyn., Chicago.
April 24-29—Am. Acad. of Neurology, St. Louis.
April 26-29—Am. Ped. Soc., Atlantic City.
April 26-29—W. Va. Acad. of Oph. and Otol., White Sulphur Springs.
May 1-3—Am. Assn. for Thoracic Surgery, Los Angeles.
May 1-5—Am. Psy. Assn., Washington.
May 3-5—Maryland Medical, Baltimore.
May 3-6—W. Va. Chap., ACS, White Sulphur Springs.
May 6—Am. Col. of Psy., Dallas.
May 8-12—Ohio Medical, Cincinnati.
May 18-20—Am. Gyn. Soc., Hot Springs, Va.
May 21-24—Am. Thoracic Soc., Kansas City.
May 22-25—Am. Urol. Assn., Washington.
June 8-14—Am. Rheumatism Assn., Dallas.
June 18-22—AMA, San Francisco.
June 24-25—Am. Diabetes Assn., San Francisco.
July 5-10—Int. Col. of Surg., Lake George, N. Y.

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Undifferentiated Lymphoma with Coexisting Myeloproliferative Disorder

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Classification of malignancies arising from the reticuloendothelial system frequently poses taxonomic difficulties because of the totipotentiality of the primitive cells in this system. Custer[3] pointed out that "in dealing with malignant diseases of the blood-forming organs it is impossible to catalogue, once and for all time, a given form of lymphoma or leukemia and be certain that it will retain that form throughout its course."

A lymphomatous process and a concomitant myeloproliferative disorder in the same patient is uncommon. This finding is of interest not only because of the diagnostic difficulties it presents but, more important, because it may aid in elucidating the pathways of cellular differentiation in the hematopoietic system.

The patient documented here had generalized organ infiltration resembling chronic myeloid leukemia or an early myeloproliferative disorder, and interspersed in the granulocytic infiltrates were undifferentiated mononuclear lympho-reticulum-type cells. There was complete absence of lymph node involvement, and the peripheral blood showed a myeloproliferative-type reaction with a high neutrophil alkaline phosphatase.

Case Report

A 63-year-old woman was admitted to the West Virginia University Medical Center because of staggering and falling to the left which had begun three months prior to admission. She had no dizziness or vertigo but complained of chills and sweating, fatigue and swelling of the ankles. One week prior to admission she noted the onset of sharp pains in the left side of the abdomen which radiated downward and which became worse on deep inspiration.

The Authors

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On physical examination, lymph nodes were not palpable but the spleen was tender and extended eight cm. below the left costal margin. Mild cardiomegaly was present. On neurological examination, there were diffuse weakness of the extremities, gross tremor of the hands and marked spasticity of both legs.

Laboratory Data: The hemogram was as follows: red cell count 2.33 million/cu. mm.; hematocrit 24 per cent; hemoglobin 7.2 Gm./100 ml.; reticulocytes 7.2 per cent; white blood cell count 3,100/cu. mm.; platelets 196,000/cu. mm. The differential count was: blasts, 1 per cent; promyelocytes, 2 per cent; myelocytes, 4 per cent; metamyelocytes, 2 per cent; segmented neutrophils, 69 per cent; basophils, 2 per cent; eosinophils, 1 per cent; lymphocytes, 5 per cent; and monocytes, 14 per cent. The sedimentation rate was 140 mm./hr. (Westergren).

The V. D. R. L., histoplasmin complement fixation test, and tests for febrile agglutinins were negative, while the C-reactive protein was strongly positive. The blood glucose was 293 mg./100 ml. and the serum calcium 7.8 mg./100 ml. Serum sodium, potassium, chloride and CO_2 were normal. The prothrombin time was 14 sec., (control 11.5 sec.) Serum protein electrophoresis demonstrated an albumin of 2.3 Gm./100 ml., and alpha 2 globulin of 0.9 Gm./100 ml.; the other

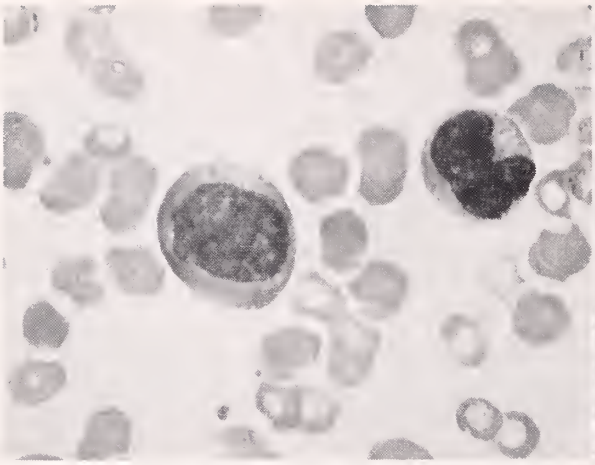


Figure 1. Photomicrograph of peripheral blood smear showing to the left, an atypical mononuclear cell with two nucleoli, and to the right, a monocyte (May—Grunwald—Giemsa stain x 1200).

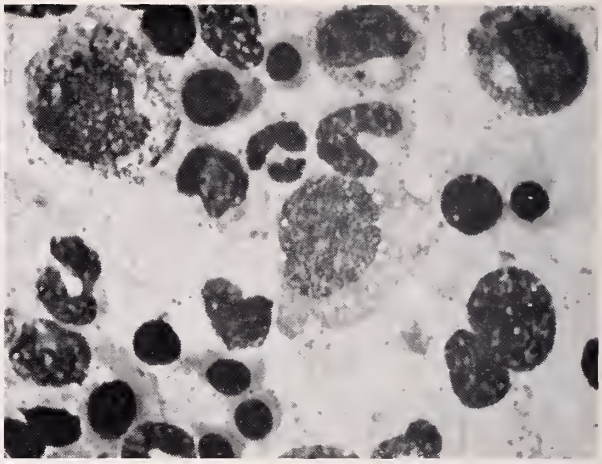


Figure 2. Photomicrograph of a bone marrow preparation obtained by sternal aspiration. Notice in the center, an atypical mononuclear cell, showing nucleoli and vacuoles in the cytoplasm (May—Grunwald—Giemsa stain x 1200).

fractions were normal. The total protein concentration was 5.5 Gm./100 ml. Several blood cultures yielded no growth. The direct Coombs test and screening test for atypical antibodies were also negative.

Two sternal bone marrow aspirations were performed, and both showed a marked hypercellularity. The most striking finding was the presence in the peripheral blood and bone marrow of atypical mononuclear cells (Figures 1, 2) with spongy nuclear chromatin and pale blue cytoplasm. Several macrophages, some engulfing red and white cells, were also seen in the bone marrow. A shift to the left in the granulocytic series and eosinophilia were present.

The platelet count dropped to 138,000/cu. mm. over a period of one week. The size of the spleen steadily increased, and the patient began to complain of itching. Two units of blood were administered with no appreciable effect on the hemoglobin level. An exploratory laparotomy with splenectomy and several biopsies were performed.

Histopathological Examination: The spleen weighed 775 Gm. and measured 16.5 x 12.0 x 6.0 cm. The capsule was moderately thick and tense. The cut surface was dark purple, and exhibited infarcts which were typically wedge-shaped and darker red in color than the remainder of the splenic parenchyma. Sections of the spleen contained infarcts in various stages of organization. In other areas of the splenic parenchyma there were a decrease in size and partial obliteration of follicles. Within the sinusoids there were increased numbers of cells, many of which were large mononuclear cells with indented, somewhat vesicular nuclei and prominent nucleoli resembling atypical reticulum cells. These cells showed marked mitotic activity. Occasional megakaryocytes were present as well as many immature cells of the myeloid series. No Reed-Sternberg cells were identified.

Retroperitoneal, iliac, and two inguinal lymph nodes, the largest of which measured 1.5 cm. in length, showed preservation of the nodal architecture with partial fat replacement, and were considered histologically nondiagnostic.

A small wedge liver biopsy had no gross pathological changes. Increased cellularity around the portal triads with some atypical mononuclear cells similar in appearance to those observed in the spleen were seen microscopically. Within the hepatic sinusoids there was evidence of extramedullary myelopoiesis.

Treatment with indomethacin (Indocin) succeeded in controlling the fever temporarily, but the patient's condition deteriorated.

A third bone marrow biopsy was characterized by pronounced toxic changes, an increased number of macrophages and more immature cells in the granulocytic series (Figure 3). A neutrophil alkaline phosphatase had a score of 284 (normal 40-80).

The patient expired two weeks later and an autopsy was performed.

Post-mortem Examination: The heart weighed 420 Gm. There was an increase in pericardial fat, and the myocardium was flabby. On microscopic examination, the myocardial fibers were of uniform appearance but slightly hypertrophied. Scattered throughout the interstitial tissues of the myocardium were small focal infiltrates composed of atypical lympho-reticulum cells and granulocytic cells.

Both lungs were slightly edematous and congested. The alveolar walls were diffusely infiltrated (Figure 4) by immature lympho-reticulum-type cells and granulocytic elements which also filled the capillaries. A few nodular infiltrates, particularly in the peribronchial areas, contained similar cells.

The liver weighed 1400 Gm. The external surface was brown-red with numerous white nodules. On cut section there were slight congestion, some fatty changes and a diffuse nodular infiltrative process throughout the parenchyma. Sections demonstrated infiltrates most marked around the portal triads (Figure 5) but also extending into the sinusoids which were composed of atypical, immature lympho-reticulum-like cells. Intermingled with these were cells of the granulocytic series and occasional lymphocytes.

The right kidney weighed 175 Gm., and the left 150 Gm. Both were pale and soft in consistency, and exhibited the same diffuse intense infiltrates described in the other organs, (Figures 6, 7). Adjacent to these infiltrates, the tubules showed some degenerative changes. A reticulum stain (Figure 8) showed that many of the cells were marginated by dense reticulum fibers which suggested a reticulum origin for these cells.

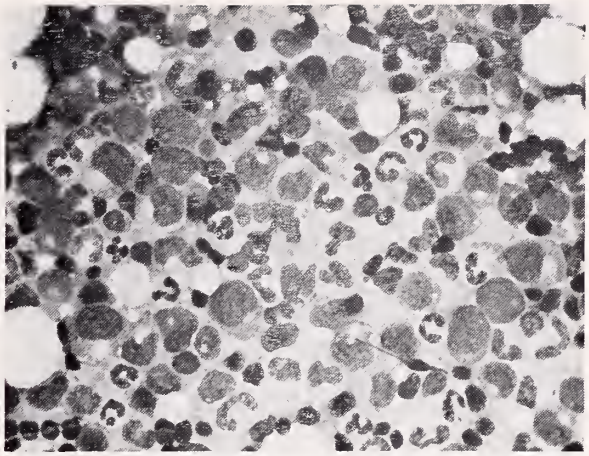


Figure 3. Photomicrograph of a bone marrow preparation obtained by sternal aspiration. Notice the increased number of promyelocytes and few myeloblasts (May—Grunwald—Giemsa stain x 750).

The bone marrow was pale red but normally trabeculated. There were some depression of

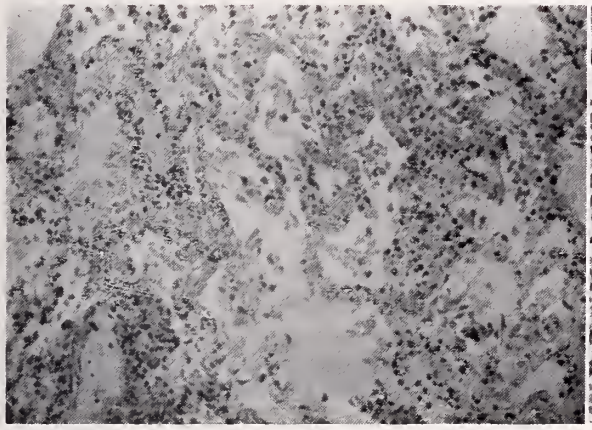


Figure 4. Microscopic section of lung showing diffuse infiltration of alveolar walls by lympho-reticulum-type cells and granulocytic elements (H. and E. x 100).

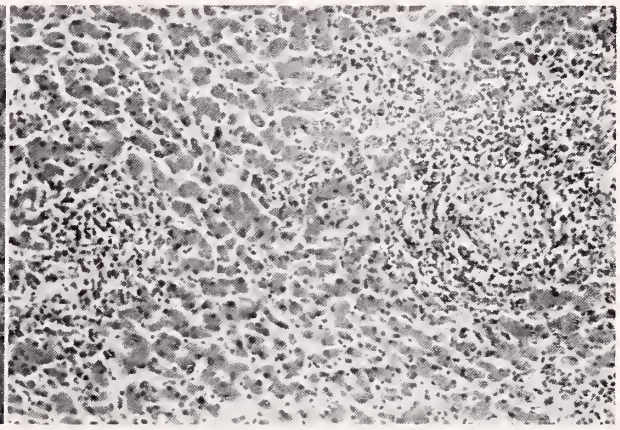
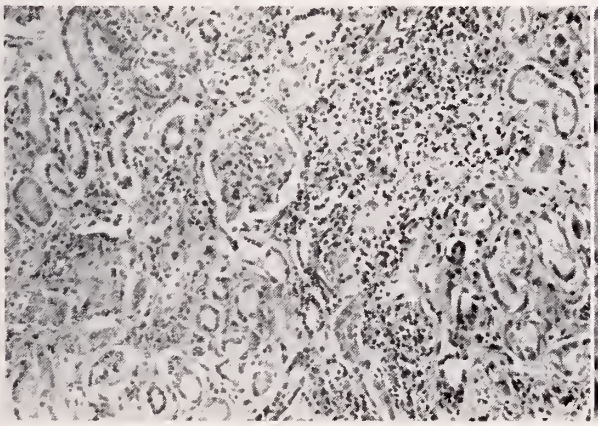


Figure 5. Microscopic section of the liver showing a nodular infiltrate around the portal triads of lympho-reticulum and granulocytic cells (H. and E. x 100).



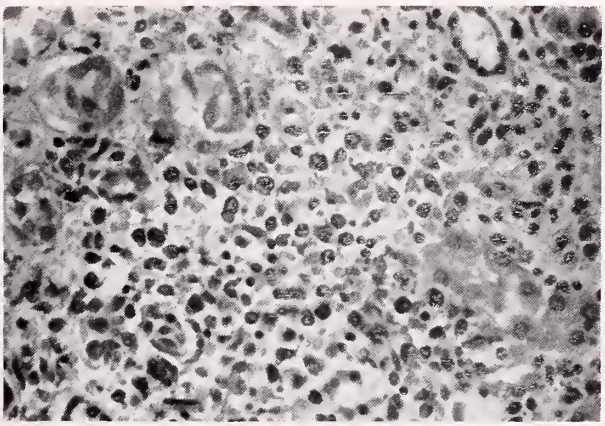


Figure 6 and 7. Low and high power microscopic views of the sections of the kidney demonstrating a diffuse infiltrate of both lympho-reticulum and granulocytic cells. Note also the tubular degeneration (H. and E. x 100 and x 400).

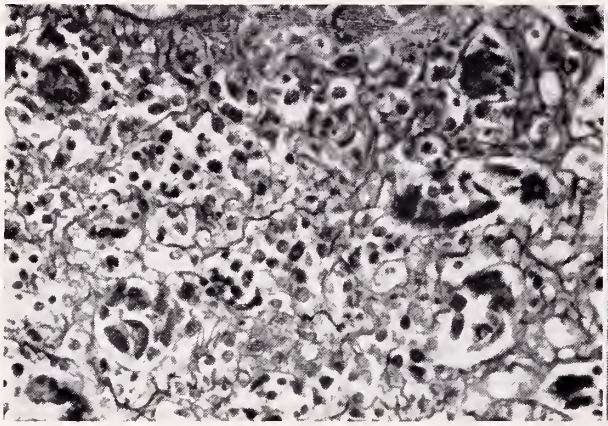


Figure 8. A reticulum stain of a section of the kidney demonstrating lympho-reticulum cells marginated by dense reticulum fibers (Gomori's reticulum stain x 400).

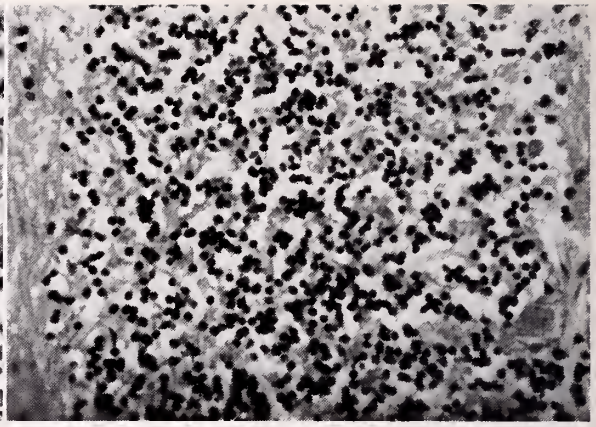


Figure 9. Microscopic section of the cerebellum showing a striking loss of Purkinje cells. Note one degenerating Purkinje cell in lower right corner (H. and E. x 100).

myelopoiesis, an increase in immature granulocytic elements, and scattered lympho-reticulum-type cells throughout the marrow.

The brain weighed 1050 Gm. and was pale. Within the cortex, and particularly within the white matter, the vessels were filled with immature granulocytic cells and were marginated by small flame hemorrhages. Areas of demyelinization and spongiosis were found around these zones.

Sections of the cerebellum showed a striking reduction of Purkinje cells with marked degenerative changes in the remaining cells. Throughout the cerebellum, foci of demyelinization were observed. These changes were consistent with those described in the acute cerebellar syndrome[8] (Figure 9).

The thyroid, pancreas and adrenals contained infiltrates similar to those in the liver, kidney, spleen and heart. The spleen had been surgically removed.

Discussion

The peripheral blood in this patient showed thrombocytopenia, leukopenia and a marked shift to the left in the granulocytes with circulating myeloblasts, promyelocytes and myelocytes. Both ante-mortem and post-mortem bone marrow findings were characterized by a granulocytic hyperplasia with foci containing numerous promyelocytes and myelocytes.

The outstanding feature on microscopic examination after autopsy was the presence in almost all organs of diffuse infiltrates of very undifferentiated lympho-reticulum cells showing prominent nucleoli, as well as cells of the granulocytic series ranging from promyelocytes and myelocytes to mature segmented neutrophils. The extramedullary proliferation, especially in the spleen, liver, kidney, and lungs, most closely resembled undifferentiated malignant lymphoma. Poorly differentiated lymphoreticulum cells predominated in these infiltrates, and a few of these cells were seen in the peripheral blood.

The possibility that the changes in the granulocytic series might represent merely a leukemoid reaction was of course considered, but the infiltration of all organs with immature and mature cells of the granulocytic series appeared more characteristic of chronic granulocytic leukemia than of leukemoid reaction. Leukemoid reaction is also accompanied by a high white cell count in the peripheral blood rather than leukopenia. While absence of low activity of neutrophil alkaline phosphatase is the usual finding in chronic granulocytic leukemia, Osgood[9] found "histologically and morphologically unmistakable granulocytic leukemia which gave a positive alkaline phosphatase." In the present case a high neutrophil alkaline phosphatase could also be due to the increased number of undifferentiated lymphoreticulum cells which are rich in alkaline phosphatase.[1]

Development of chronic lymphatic leukemia in the evolution of a lymphosarcoma, which has been called the leukemic phase of lymphosarcoma, is not an uncommon observation. Both diseases are considered to be primary tumors arising from cells derived from primitive mesenchyme. Less frequent are observations of a lymphomatous process preceding, accompanying, or following the discovery of chronic granulocytic leukemia. Fewer than fifteen such cases have been reported. A reticulum cell lymphoma which three years later developed into an acute myeloblastic leukemia was reported by Beutler.[2] Six similar cases were reported by Zeffren and Ultmann.[13] Two cases of Howell and Whitfield[5] were first diagnosed as chronic granulocytic

leukemia and two years later lymph node biopsies in both demonstrated the presence of lymphosarcoma. Wilson and Van Slyck[12] presented an additional patient in whose case chronic granulocytic leukemia appeared two years after the onset of lymphosarcoma. Sardesai and Bhatia[10] reported a patient in whose case the two diseases were discovered simultaneously, and Lazlo and Grode,[7] in a recent paper, presented two cases of granulocytic leukemia associated with reticulum cell sarcoma. Custer[4] mentioned four cases in which both a lymphomatous and a myeloproliferative process were found. One of the patients had Hodgkin's granuloma and the other three had reticulum cell sarcoma, but all terminated in acute myeloblastic leukemia.

The diagnosis of Hodgkin's disease was not entertained in the present case because of the absence of lymph node infiltration and absence of Reed-Sternberg cells.[6] Histiocytic medullary reticulosis, as originally described by Scott and Robb-Smith,[11] was also considered; however, none of the histological characteristics of this entity was found.

The hematologic findings in this patient can be ascribed to the presence of two independent malignant processes or to a single malignant change which is manifested in two cell lines. We cannot determine with complete certainty if the alterations in the lympho-reticulum and granulocytic cell lines occurred simultaneously, although both were present when the patient was first seen and progression of the process in both lines was roughly similar, suggesting that this was the case. Even with simultaneous onset, the likelihood of two independent malignant transformations in two independent cell lines cannot be completely excluded, but the chances of this occurring are statistically small. There are two other possible interpretations of the hematologic findings in this patient. The lymphomatous process could represent the primary malignant process and the alterations in the granulocytic series could be merely a non-malignant myeloproliferative response. This also appears unlikely in view of the diffuse tissue infiltration with immature cells of the granulocytic line, the foci of proliferating immature granulocytes in the marrow, and the rather marked hematologic changes in the peripheral blood. The remaining possibility is that there was a single malignant change in the primitive lymphoreticulum cells which then partially differentiated into both lymphoid and granulocytic cells. Using conventional methods, however, it was not possible to find intermediate cell forms to link the undifferentiated lymphoreticulum cells and the immature cells of the granulocytic series.

In view of the histological findings as well as those in the peripheral blood and bone marrow, the most likely diagnosis appeared to be undifferentiated lymphoma with a coexisting myeloproliferative disorder, probably chronic myelogenous leukemia. The initial malignant change could have been initiated in a few reticulum cells, some of which remained undifferentiated, while others retained the capability of differentiating along the granulocytic cell line to produce the granulocytic infiltration.

Acknowledgments

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References

1. Ackerman, G. A.: Histochemical Differentiation During Neutrophil Development and Maturation, Ann. New York Acad. Sci. 113:537-565, 1964.
2. Beutler, B: The Development of Acute Myelogenous Leukemia in a Patient With Reticulum Cell Lymphoma, Ann. Int. Med. 40:1217-1222, 1954.
3. Custer, R. P.: Borderlines Dim in Malignant Disease of the Bloodforming Organs, Radiology 61:764-770, 1953.
4. ....The Changing Pattern of Lymphocytic Malignancies in "The Lymphocyte and the Lymphocytic Tissue." Internat. Acad. Path. Monograph, J. N. Rebuck, ed., New York, N.Y., Paul B. Hoeber, pp. 181-193, 1960.
5. Howell, J. S. & Whitfield, A. G. W.: Chronic Myeloid Leukemia With Lymphosarcoma, J. Clin. Path. 16:432-435, 1963.
6. Jackson, H., Jr., & Parker, F.: Hodgkin's Disease. II Pathology, New England J. Med. 231:34-44, 1944.
7. Lazlo, J. & Grode, H. E.: Granulocytic Leukemia and Reticulum cell Carcoma, Cancer 20:545-557, 1967.
8. Newcastle, N. B.: Subacute Cerebellar Degeneration with Hodgkin's Disease, Arch. Neurol. 9:407-413, 1963.
9. Osgood, E. E.: A Unifying Concept of the Etiology of Leukemias, Lymphomas and Cancers, J. Nat. Cancer Inst. 18:155-166, 1957.
10. Sardesai, H. V. & Bhatia, K. C.: Lymphosarcoma With Myeloid Leukemia. Case Report. Indian J. Med. Sci. 13:849-851, 1959.
11. Scott, R. B. & Robb-Smith, A. H. T.: Histiocytic Medullary Reticulosis, Lancet 237:194-198, 1939.
12. Wilson, Z. & Van Slyck, E. J.: Coexistent Lymphosearcoma and Chronic Granulocytic Leukemia, Cancer 19:809-816, 1966.
13. Zeffren, J. L. & Ultmann, J. E.: Reticulum Cell Sarcoma Terminating in Acute Leukemia, Blood 15:277-284, 1960.

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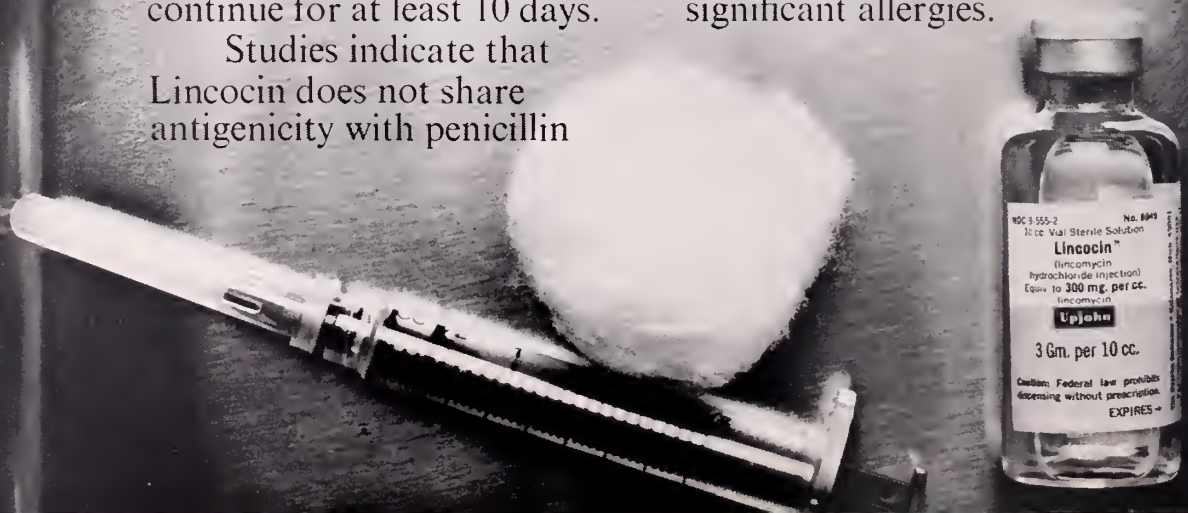

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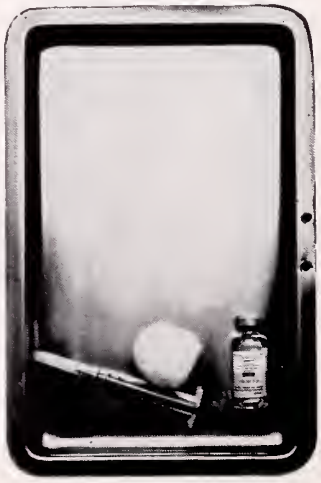

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New Method in Continuous Subarachnoid Anesthesia

Manuel Martinez-Manzor, M. D.

When Lemmon, in 1940, introduced the continuous spinal anesthesia method by introducing the maleable needle into the subarachnoid space, this created enthusiasm to achieve the best possible method in the application of this revolutionary idea. Since this was accepted with enthusiasm, it motivated others, and in a few months Hingson and Edward applied the same technique for continuous caudal anesthesia.

The substitution of a plastic catheter brought a more sophisticated application and this was more advantageous than the maleable needle. This was introduced by Adams, Lundy and Seldon in continouous caudal anesthesia, and Touhy (helped by a special and well known needle designed by himself) in continuous subarachnoid anesthesia, respectively; later Martinez-Curbelo closed this fruitful decade giving his valuable contribution method: the continuous extradural anesthesia by means of the urethral catheter and the Touhy needle with a Huber point.

The method of Martinez-Curbelo unquestionably represents a tremendous elective procedure and in the best hands the method of choice in obstetric anesthesia; its advantages in this important field, however, necessarily restrict its use in surgery to those cases in which a broad or deep muscular relaxation is not of prime importance, and to diagnostic and therapeutic procedures.

The subarachnoid anesthesia has the benefit of wider application in surgery. This method is not surpassed by any other procedure and in many cases is indubitably the procedure of choice.

The Lemmon technique and the modified technique by Touhy have great disadvantage in increasing the rate of postanesthesia sequlae because of the perforation of the dura mater and arachnoid by a large needle. Its use practically has been limited to a negligible number of workers.

The method I propose consists of a thin needle and a plastic catheter which is a simple combination. The catheter I designed is similar to a urethral catheter in consistence and calibration. It is longer than the regular 36" size Fr. 4, (1.6 mm.) O. D. with a 25 gauge needle firmly attached to the distal end of the catheter and passing beyond the tip of the catheter 0.5 cm. This catheter is able to pass through a 15 gauge needle.

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Technique

The extradural space is reached with a straight 15 needle following the technique used by Martinez-Curbelo; in my opinion (after many years of its use successfully) it was the most practical and refined. After the skin has been scrubbed with an antiseptic solution and dried completely, with the patient in lateral position (if the sacral block is not the only objective) the interspinous vertebral space selected, and the anesthesia of the skin and soft tissues performed, the needle with the stylet in place is introduced trying to present the bevel in longitudinal position, to make easier its pass through the skin and supraspinous and interspinous ligaments, and when the major resistance of the flavum ligament is perceived, the stylet is removed and the catheter connected to a specially treated, very sensitive, small, 2 cc. syringe of glass filled with air. At this moment the introduction of the needle will be very gentle (micrometrically) and with the other hand trying to force the penetration of the air through the needle, this maneuver will result unsuccessfully until the precise moment the extradural space is reached and a sudden lack of resistance prove it; the air of the syringe is introduced easy and rapidly and a sudden inversion of the resistance will be present this time against the removal of the plunger (this is what we call the double inverted resistance sign), the former given by flavum ligament, the latter by the relative negative pressure of the extradural space.

Once the extradural space is reached, the catheter is introduced and, the introducer in place, you apply firm and quick pressure in the catheter and this will enable the needle to penetrate the dura mater and arachnoid, reaching the subarachnoid space; the introducer is removed and a small 25 caliber needle with a cut end is introduced on the proximal end of the catheter. Then a syringe is connected to the needle and a

gentle suction is made until the CEF is obtained. The anesthesic solution which must be ready in another syringe is introduced and the catheter is filled with distilled water and placed on the back of the patient in such a way that will permit the intermittent injection of the anesthetic solution any time it will be needed during the surgical procedure.

The anesthetic solution I recommend for this procedure is Tetracaine 0.2 per cent in 10 per cent dextrose in water, and Neosynephrine 0.1 per cent.

Advantages

1. All the advantages offered by a continuous anesthetic procedure.
2. Substantial reduction in the side-effects of the anesthetic drugs and the immediate complications during the anesthetic procedure.
3. Less post-anesthetic sequelae.

References

1. Touhy, E. B.: Continuous Spinal Anesthesia, Anesthesiol. J.
2. Adams, R. C., Lundy, J. S. & Seldon, T. H.: Continuous Caudal Anesthesia and Analgesia. A Consideration of the Techniques of Various Uses and Some Possible Dangers, JAMA 122:152, 1943.
3. Size, L. F.: Pontocaine Glucose Solution for Spinal Anesthesia, Surg. Clin. North America 15:150, 1935; 16:1707, 1936.
4. Martinez-Curbelo Manuel: Continuous Peridural Segmented Anesthesia by Means of Urethral Catheter, Anesthesia & Analgesics 28:13, 1949.
5. Hingson, R. A. & Southworth, J. L.: Continuous Caudal Anesthesia, Am. J. Surg. 58:93, 1942.
6. Adriani, L. & Roman, Vega D.: Saddle Block Anesthesia, Am. J. Surg. 71:12, 1946.
7. Dripps, R. D.: A Comparison of the Malleable Needle and Catheter Techniques for Continuous Spinal Anesthesia, New York State J. Med. 1595-1950.

Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (not onion skin or flimsy), standard letter sized (8½ by 11 in.) white paper. Wide margins (at least 1¼ in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Authors are requested to submit a carbon copy with the original or retain same in the event the manuscript is lost in transmittal.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for cuts should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it. The author will bear the cost of all over two one-column halftone cuts.

All scientific material appearing in *The Journal* is reviewed by the Editorial Board. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 1031, Charleston, W. Va. 25324.

Electrocardiogram of the Month

Chronic Symptomatic Sinus Bradycardia Treated With a Permanent Demand Pacemaker

Donald K. Chung, M. D., and Edward K. Chung, M. D.

In recent years, permanent artificial pacemakers have been increasingly used to treat patients with chronic symptomatic sinus bradycardia.[1, 2]

A case of unusually slow sinus bradycardia (27/minute) associated with low cardiac output syndrome treated with the insertion of an artificial pervenous demand ventricular pacemaker will be presented.

The Authors

- **Donald K. Chung, M. D., Cardiologist, Veterans Administration Hospital, Clarksburg, and Assistant Professor of Medicine, West Virginia University School of Medicine, Morgantown; and Edward K. Chung, M. D., Professor of Medicine and Director, Electrocardiographic Laboratory, West Virginia University School of Medicine, Morgantown.**

Case Report and ECG Analysis

An 83-year-old man was admitted to the Veterans Administration Hospital in Clarksburg, West Virginia, on March 9, 1971. For three to four years prior to admission he had experienced many episodes of falling followed by blurring vision and general weakness. He had never lost consciousness completely but experienced easy forgetfulness. Two months before entry, he began to notice ankle swelling and exertional dyspnea. There was no history of cardiac pain, hypertension or diabetes mellitus. He was not taking any drug. On examination, he appeared pale with very sluggish response to questions. There was slight cervical venous engorgement, bi-basilar moist rales, Grade II/VI ejection systolic murmur at left lower sternal border and 2+ pitting edema on ankles. Blood pressure was 130/80. A chest roentgenogram showed moderate generalized cardiac enlargement and slight congestive heart failure. Blood urea nitrogen was 30 mg. per cent. Serum enzymes and electrolytes were normal. An electrocardiogram revealed no significant abnormality except the findings shown on Figure 1. Lead II-a and b are continuous strip and show sinus arrhythmia with very marked sinus bradycardia (27 to 33/minute) without any escape mechanism from subsidiary pacemaker. The longest R-R interval was 2.08 seconds. Intravenous injection of Atropine 0.8 mg. resulted

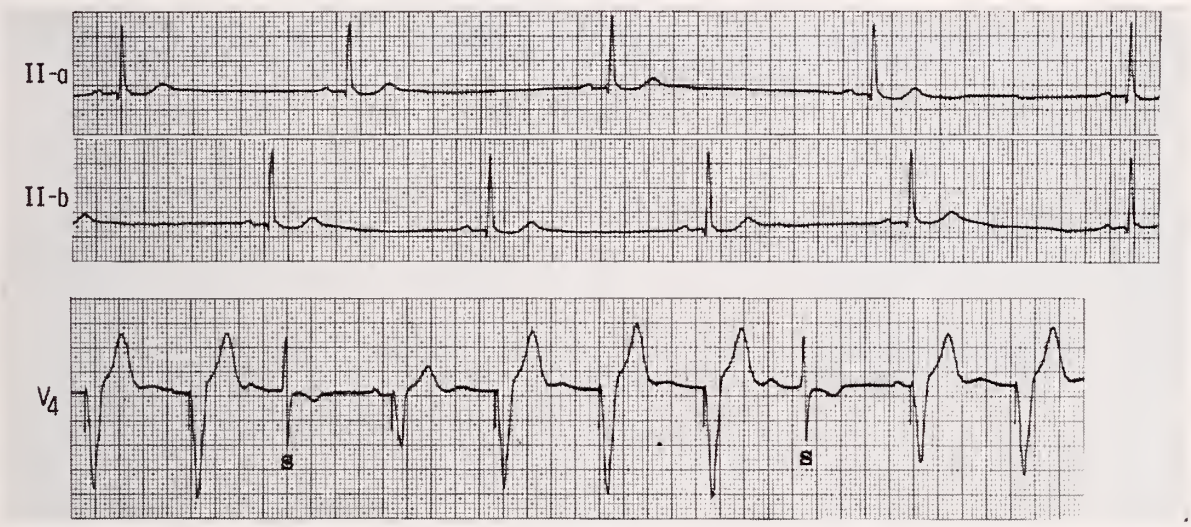

Figure 1

in acceleration of sinus rate to 64 per minute but the drug was subsequently discontinued because of intolerable side effects. His cardiac rate was kept 40 to 60 per minute with continuous intravenous infusion of Isoproterenol. On the second hospital day, a permanent transvenous demand pacemaker (Medtronic 5942) with a present rate of 70 per minute (Figure 1-V_4) was inserted. The third and eighth ventricular complexes are ventricular captured beats (sinus conducted beat) with prolonged P-R interval (0.29 to 0.32 seconds). The fourth and ninth ventricular complexes are fusion beats. During the 24-hour period after the insertion of pacemaker, urinary output increased to 1,300 cc from 325 cc (pre-operative amount). By the sixth postoperative day, congestive heart failure improved and blood urea nitrogen came down to normal. He began to walk without difficulty at this time.

Comments

Sinus bradycardia denotes that the cardiac impulse originates normally from the sinoatrial node with a rate slower than 60 beats per minute. By history, sinus bradycardia in this patient was chronic in duration. The low cardiac out-put syndrome manifested by blurred vision, effort fatigue, heart failure and impaired renal and cerebral function was undoubtedly due to marked slowing of cardiac rate since all of these manifestations were promptly improved merely by increasing the ventricular rate with an artificial pacemaker. However, the cause of such marked sinus bradycardia in this patient remains unclear. Acute coronary heart disease is unlikely present in view of negative history of cardiac pain and negative electrocardiographic findings. Unique finding in this case is perhaps the extreme sinus bradycardia without escaped beats from subsidiary pacemaker. Drug treatment of this condition is frequently unsatisfactory because of inadequate response of cardiac rate or because of intolerable side effects.[1]

Extremely slow sinus bradycardia is not too uncommon in elderly individuals and the term "sick sinus syndrome" has been used in this case. In this circumstance, the use of permanent artificial (ventricular) pacemakers is considered to be the treatment of choice.

References

1. Clarke, M., Evans, D. W., and Milstein, B. B.: Sinus Bradycardia Treated by Long-Term Atrial Pacing. British Heart Journal, 32, 458-461, 1970.
2. Fowler, N. O., Fenton, J. C., and Conway, G. F.: Syncope and Cerebral Dysfunction Caused by Bradycardia Without Atrioventricular Block. American Heart Journal, 80, 303-312, 1970.

Do It Now!

Circle These Dates on Your Calendar

Thursday, Friday and Saturday
August 19-21, 1971

104th Annual Meeting

WEST VIRGINIA STATE MEDICAL ASSOCIATION

The Greenbrier, White Sulphur Springs, W. Va.

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X-Ray Case of the Month

Joel Temple, M. D., Internist, Fairmont; and
Ray A. Harron, M. D., Radiologist, Bridgeport

Joel Temple, M. D.

This 24-year-old white male presented himself complaining of gross hematuria approximately two months ago. This had subsided to some degree but occasionally it still was noted. Urinalysis at the present time showed microscopic hematuria and albumin uria. An IVP was obtained.

Ray A. Harron, M. D.

This film shows bilaterally enlarged kidneys which are smooth. There is good function bilaterally on the early films. The collecting system is not disturbed. Irregularly enlarged kidneys would indicate polycystic disease but with smooth regular outline of the kidney shadows and with no distortion of the collecting system, bilateral leukemic infiltrates, amyloidosis, or glomerulonephritis should be considered. In view of the clinical history glomerulonephritis is the favored diagnosis.

Doctor Temple.

A right renal biopsy was done and a microscopic report revealed glomerulonephritis.

Figure 1

104th ANNUAL MEETING

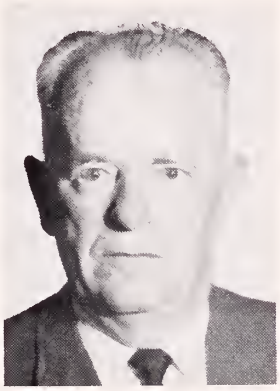
of the

West Virginia State Medical Association

The Greenbrier

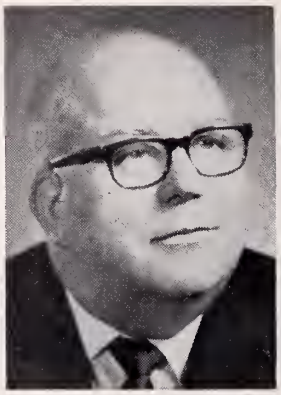
AUGUST 19-21, 1971

PLAN NOW TO ATTEND



Report from . . .

The Delegates



A SUCCESSFUL TEAM EFFORT

DR. Carl Hoffman was named President Elect of the American Medical Association during the 1971 Annual Meeting held in June in Atlantic City, New Jersey. Thus, Doctor Hoffman will be the first West Virginia physician to serve as President of the AMA when he is inaugurated during the 1972 Annual Meeting in San Francisco next June.

His victory culminated a steady campaign which dated back to the Spring of 1969 when the Council of The West Virginia State Medical Association unanimously endorsed Doctor Hoffman's successful candidacy for the AMA Board of Trustees. While Doctor Hoffman was serving with distinction on the Board, his Campaign Steering Committee had its sights set on another election in June, 1971.

Your delegates would like to pay tribute to the many, many West Virginia physicians and their wives who participated in what was the finest team effort we have ever witnessed in an AMA election. It would be impossible to list on this page the names of those persons who spent countless hours working in Carl's behalf. One AMA delegate from a Southern state told us in Atlantic City that he received more than ten letters from physician friends in West Virginia. We know each AMA delegate was contacted several times during the past four months—by both letters and phone calls.

Your delegates are mighty proud of Doctor Hoffman. He has won high honors for himself, the Association and the State of West Virginia. We also are equally proud of our highly efficient Campaign Committee. All deserve a pat on the back for a job well done.

We salute Dr. George R. Callender, Jr., for the major role he played in the campaign. We especially appreciate his generosity in relinquishing his final President's Page to permit your delegates to pay tribute to our wonderful and victorious "Hoffman for President Elect Campaign Committee."

FRANK J. HOLROYD, M. D.
AMA Delegate

RICHARD E. FLOOD, M. D.
AMA Delegate

THE WEST VIRGINIA MEDICAL JOURNAL

Official Organ of the West Virginia State Medical Association

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EDITORIALS

THE 104th

The 104th Annual Meeting at The Greenbrier this month will mark the end of a busy and most productive year for officers and members of the West Virginia State Medical Association.

In June of this year, we realized a goal never before attained by a practicing physician in West Virginia—the highest office in the American Medical Association. Dr. Carl Hoffman of Huntington will assume the Presidency of the organization during the 1972 annual meeting in San Francisco.

How this feat was accomplished is best summed up in the report from your delegates published on the page opposite. We would be remiss, however, if we did not give credit to an instrumental figure in the campaign—Dr. George R. Callender, Jr., President of the State Medical Association.

During his term of office, Doctor Callender spent a great deal of time campaigning for Doctor Hoffman while paying official visits to regional and national meetings. He also made it a point to discuss the campaign during his appearances before meetings of component societies throughout the State. The support of many state physicians aided tremendously in Doctor Hoffman's campaign.

Much has been accomplished during Doctor Callender's term of office; however, he would be the first to admit that many problems remain to be solved. We are fortunate that Doctor Callen-

George R. Callender, Jr., M. D.
President

der will serve during the coming year as Chairman of the Council of the State Medical Association.

Dr. Harry S. Weeks, Jr., of Wheeling, will succeed Doctor Callender at the final session of the House of Delegates on Saturday afternoon, August 21. He has worked up through the ranks and probably is best known for his work in negotiating with government agencies and other third-party programs. He has served as Chairman of the Medical Economics Committee and was a member of the Council for four years before being elected Vice President and President Elect. We believe all will agree Doctor Weeks is eminently qualified to serve as President of the Association.

We hope you plan to be with us at The Greenbrier. More than 650 persons had made reservations as this issue of *The Journal* was placed on the press. We also hope you will make every effort to arrive on Wednesday, August 18. There will be a reception honoring Doctor Hoffman that evening and Gov. and Mrs. Arch A. Moore, Jr., will be among the guests. All physicians and their wives are cordially invited to attend.

In addition to Governor Moore, another honor guest will be Dr. Wesley W. Hall of Reno, Nevada, President of the American Medical Association. He will deliver an address at the first session of the House of Delegates on Wednesday afternoon, August 18.

Doctor Hoffman and Governor Moore will share the platform at the opening of the first general scientific session on Thursday morning. During his part of the program, Doctor Hoffman will give us a report on how to wage a successful campaign in medical politics.

Dr. Clark K. Sleeth of Morgantown and the members of his Program Committee have put together a scientific program which should be of interest to all practitioners.

Two of the guest speakers are no strangers to West Virginia. Dr. Jay M. Arena is a native of Clarksburg and a graduate of the two-year WVU School of Medicine. Dr. Curtis P. Artz practiced medicine in Grantsville from 1942 to 1948. He served as President of the Parkersburg Academy of Medicine and also was elected as a member of the Council of the State Medical Association.

Doctor Artz will serve as Moderator for a "Symposium on Cancer" at the first general scientific session on Thursday morning. Doctor Arena, an authority in the field of poison control, will present a paper on Friday morning and also will appear before the Section on Pediatrics that afternoon.

Once again, the Auxiliary will be in charge of the entertainment program. Mrs. Robert J. Tchou, the President, and her Convention Co-Chairmen, Mrs. Robert R. Pittman and Mrs. R. M. Ferrell, also have arranged interesting business sessions. Speakers will include the Presidents of the AMA and Southern Medical Auxiliaries.

All members and guests are urged to spend several hours visiting the exhibits. An unusually large number of interesting scientific exhibits will be on display plus the highly informative industrial exhibits. We hope you will make it a point to visit with each of our exhibitors. We are indebted to them for their splendid and continued support of our annual meetings.

We'll see you at The Greenbrier!

FRANK J. HOLROYD, M. D.— WEST VIRGINIA'S OWN DISRAELI

Elsewhere in this issue note is being taken of the great honor accruing to the West Virginia State Medical Association as a result of the election of Dr. C. A. Hoffman to the office of President Elect of the American Medical Association. This editorial is about the man who, next to Doctor Hoffman, was most responsible for making that election possible—Dr. Frank J. Holroyd of Princeton, West Virginia.

It detracts not in the least from Doctor Hoffman's accomplishment to honor Doctor Holroyd. The first to acknowledge this and to acclaim Doctor Holroyd would be Doctor Hoffman. Every serious candidate needs an accomplished campaign manager. Many an otherwise well-qualified candidate has been left at the post for the lack of organization and particularly for the lack of a man to plan and organize his campaign. For Carl Hoffman, Frank Holroyd was this man.

Frank Holroyd has been around this State for a long time. He was born in Athens, West Virginia, and started practice in Princeton in 1934 after graduating from Concord College, the two-year WVU School of Medicine and the University of Maryland School of Medicine. He served as President of the Mercer County Medical Society and was elected to the Council in 1940, before becoming President of the West Virginia State Medical Association in 1951. For years, he has been Chairman of the Legislative Committee of the West Virginia State Medical Association and he has been Chairman of the Board of Directors of WESPAC since that organization was formed.

In 1952, Frank was elected a West Virginia Delegate to the AMA House of Delegates. From

that time to the present, his reputation and status within the workings of the AMA have grown steadily. He helped organize Aces and Deuces, an organization of states with one or two delegates within the House of Delegates of the AMA and for years has been the permanent Secretary-Treasurer of that organization.

Through the years, Frank has served on a variety of AMA councils and committees and has influenced the election of numerous AMA trustees and officers. During this time, he has been an effective force in setting AMA policy and the course of action on many vital issues.

His grandest accomplishment to date is the election of Doctor Hoffman, which takes on added significance when one considers the fact that Frank served in a similar managerial capacity for the incumbent President of the AMA, Dr. Wesley W. Hall of Nevada. Bringing your man in two years in a row is an unprecedented accomplishment within the AMA and serves to measure the effectiveness of our man Frank within that organization.

There is an old saying to the effect that a prophet is without honor in his hometown. To a certain extent this is true for Frank Holroyd. Certainly there are relatively few doctors in West Virginia aware of the enormous respect which this man commands with AMA officials throughout the country.

A man like Frank generates a lot of feeling—some positive, some negative. This happens because men like him are doers, and people who do things sometimes interfere with others trying to do things, and sometimes they step a little bit on the sitters. As a consequence, some have liked Frank and some have not; but, like him or not, it is impossible to know him at all and fail to respect him. Over the years Frank has had causes, has advocated things, has pushed for things. It has not always been obvious why, and some of his causes have been controversial, but time has always seemed to prove his wisdom and to vindicate his judgment.

As in the campaign for Carl Hoffman, Frank's role has always been a selfless one with never a suspicion of personal gain or self-aggrandizement. His goals have always been to provide better health care for the sick and a better climate for physicians to provide this health care, both in West Virginia and the nation as a whole.

The West Virginia State Medical Association takes great pride in Carl Hoffman and in his accomplishments; we take equal pride in Frank J. Holroyd and in his accomplishments. *The Journal* is pleased at this opportunity to recognize and applaud the dedicated service of these two remarkable men.—SDW.

PHYSICIANS PRAISED BY NEWSPAPER

The importance of Huntington as a medical center has been demonstrated by the election of two Cabell County Medical Society members as presidents of two of the largest general medical societies in the country.

Earlier in the year Dr. Albert C. Esposito was elected President of the Southern Medical Association, and last week Dr. Carl A. Hoffman was chosen President Elect of the American Medical Association.

A search of the records reveals that this is the first time that the presidents of these two organizations have ever been from the same state at the same time, let alone from the same medical society.

Both of the specialists have written papers and have appeared as speakers before their medical specialty organizations. Doctor Hoffman, a urologist, taught pre-medical subjects at Marshall University, and Doctor Esposito taught in the Department of Ophthalmology at Ohio State University. He continues on the teaching staff of the American Academy of Ophthalmology and Otolaryngology. They have both served as president of the county and the state medical societies.

Both are strongly committed to the improvement of medical care for the state. Doctor Esposito has advocated for several years the establishment of a medical school in Southern West Virginia. Doctor Hoffman said on his return here from the AMA Atlantic City convention:

"My first goal will be to unify our profession and my second goal will be to fight for improved medical care for the public."—*Editorial in the Huntington Advertiser.*

Health Insurance Benefits

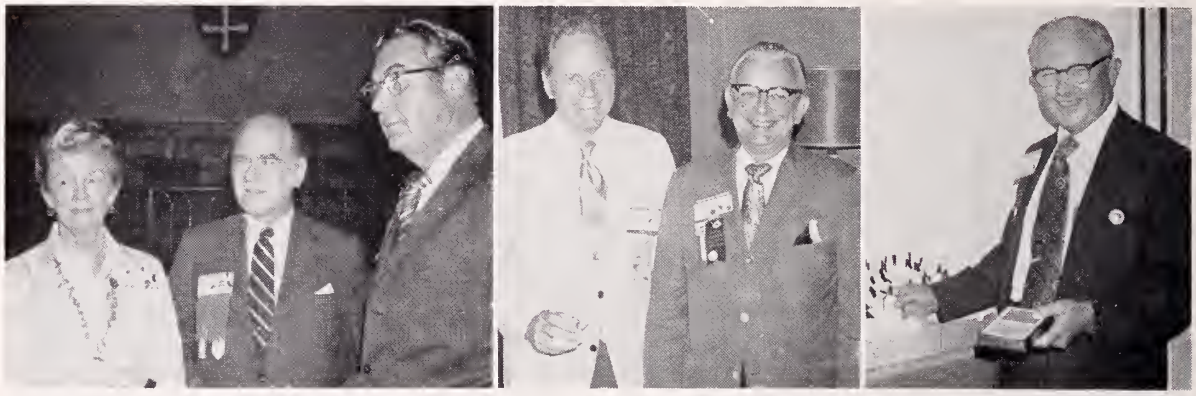
More than $9.3 billion in health insurance benefits—a new high—were paid out by insurance companies last year, the Health Insurance Institute reported recently.

This represents an increase of nearly 20 per cent over the $7.8 billion paid in benefits during the previous year.

The record total means Americans are receiving an average of nearly $26 million daily from insurance companies alone to help pay their medical expenses.

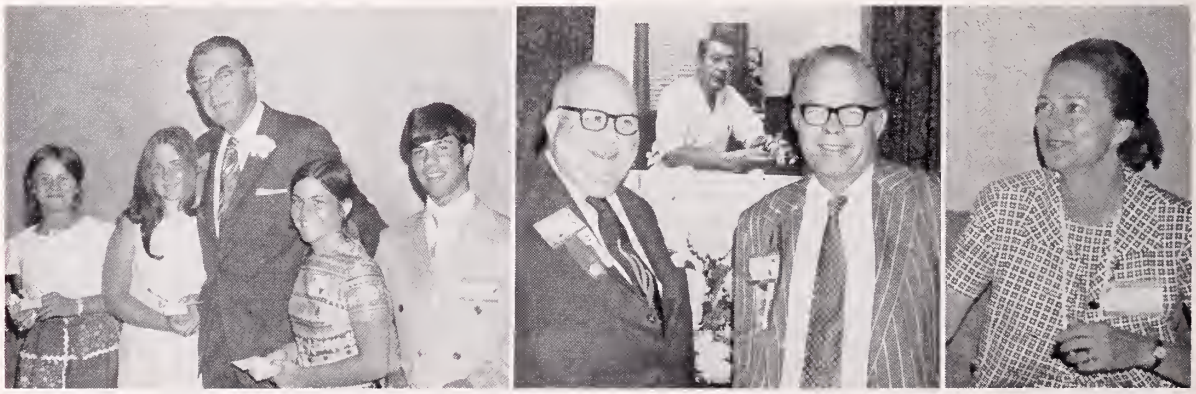
Estimates for benefits paid by all private health insurance organizations during 1970, including health insurance companies was $17.4 billion, an increase of more than $3 billion over the previous year.

It Happened in Atlantic City!



Dr. C. A. (Carl) Hoffman, at the right in the left photo above, talks with Dr. Russell B. Roth of Erie, Pennsylvania, Speaker of the American Medical Association's House of Delegates, and Mrs. Roth, during the AMA's annual meeting in Atlantic City in June. In the center photo, Dr. Worthy W. McKinney, left, of Beckley, and Dr. Kenneth G. MacDonald of Charleston, Vice President and Treasurer, respectively, of the West Virginia State Medical Association, relax in the West Virginia Suite. At the right, Dr. Maynard P. Pride of Morgantown displays corncob pipes—like those used by Doctor Hoffman—and playing cards given to visitors to the suite as favors.

Two Past Presidents of the West Virginia State Medical Association, Dr. Athey R. Lutz of Parkersburg and Dr. George F. Evans of Clarksburg (left to right in left photo above) were among visitors in the West Virginia Suite. In the center photograph is Dr. George R. Callender, Jr., of Charleston, the State Medical Association's President; while at the right Doctor Callender watches as Dr. Maynard P. Pride of Morgantown congratulates a happy and grateful Mrs. C. A. Hoffman after her husband's election as AMA President Elect.



Dr. C. A. (Carl) Hoffman expresses his appreciation (left photo above) for help his young friends provided in the West Virginia Suite at the American Medical Association convention in Atlantic City. With Doctor Hoffman are, left to right, Miss Amy Pride, daughter of Dr. and Mrs. Maynard P. Pride of Morgantown; Miss Ann Callender, daughter of Dr. and Mrs. George R. Callender, Jr., Charleston, and Miss Mary and Mr. Rick Corbitt, children of Dr. and Mrs. Richard W. Corbitt of Parkersburg. In the center photo, Dr. Richard E. Flood of Weirton, at left, and Dr. Stephen D. Ward of Wheeling, pose beneath an enlarged photograph of Doctor Hoffman while Mrs. Callender, at right, looks on.

Newton's Fifth Law

A very gracious Dr. Claude E. Welch (left) of Boston was among the first to congratulate Dr. C. A. (Carl) Hoffman after the Huntington urologist was chosen President Elect of the American Medical Association in Atlantic City. Doctor Welch, a general surgeon, was Doctor Hoffman's only opponent.

This piece really does not belong in the editorial columns. It is the simple recital of a series of ancient and recent events, with mention of their bearing on present conditions. All of my readers are still familiar with Newton's three basic laws and their influence on every-day life.

About 50 years ago, I first heard of Newton's Fourth Law, which had to do with certain urologic phenomena associated with male senility. Many of my age group will question the use of the phrase "last drop" rather than "last dram" in this fourth law.

Now a fifth law of motion has come into use—simply stated, "Cream Will Always Rise to the Top." This fifth law was occasioned by recent events in organized medicine. One of our members was recently named President Elect of the American Medical Association—a remarkable progression over a span of 25 years from President of his county medical society to the highest office in organized medicine. Another West Virginian from the same county society is incumbent President of the Southern Medical Association.

The entire career of Carl Hoffman is filled with incidents and attainments which prove the fifth law—"No matter how much you shake it, the cream will always rise to the top." The events in his professional and civic careers have borne out this dictum many, many times.

West Virginia is proud of Carl Hoffman, and as his colleagues we wish to formally and sincerely express our delight with the state of high honor he now occupies—JSK.

GENERAL NEWS

Distinguished Guests To Attend Annual Meeting, Aug. 19-21

Dr. Wesley W. Hall, Reno, Nevada, surgeon and President of the American Medical Association, will be among honored guests at the West Virginia State Medical Association's 104th Annual Meeting this month.

Wesley W. Hall, M. D.
AMA President

The Program Committee also said that Dr. C. A. (Carl) Hoffman of Huntington, the AMA's President Elect, and Gov. Arch A. Moore, Jr., will be recognized at the meeting's first general session.

The meeting is scheduled for Thursday through Saturday, August 19-21, at The Greenbrier in White Sulphur Springs, with Doctor Hall to address the first of two sessions of the House of Delegates on Wednesday afternoon, August 18.

Doctor Hall was installed as the AMA's 126th President in June in Atlantic City. A native of Lumberton, Mississippi, he is a graduate of Mississippi College and received his M. D. degree in 1930 from the Tulane University School of Medicine in New Orleans.

Doctor Hall is a Fellow of the American College of Surgeons, Southeastern Surgical Congress and International College of Surgeons. A former President of the Nevada State Medical Association, he was Nevada's representative in the AMA's policy-making House of Delegates from 1952 until 1961, when he was elected as an AMA Trustee. He served as Chairman of the Board from 1966 to 1968.

Presidential Address

Dr. George R. Callender, Jr., of Charleston, the West Virginia State Medical Association's retiring President, will deliver his Presidential Address at the second and final session of the House of Delegates on Saturday afternoon, August 21.

Pre-Convention Meetings

The Medical Association's Council, as well as its House of Delegates, will have a meeting prior to the convention's formal opening. The Council's session is scheduled for 10 A.M. on Wednesday, August 18, with Dr. Maynard P. Pride of Morgantown, the Chairman, presiding. The first House of Delegates session will follow at 3 P.M. on Wednesday.

The registration desk will be open from 8:30 A.M. to 5 P.M. each day beginning Wednesday and for the remainder of the convention. Registration will be in the Main Floor Lobby of The Greenbrier.

General Scientific Sessions

The three general scientific sessions will be held in the Governor's Hall in The Greenbrier's West Virginia Wing, and the first, at 9:45 A.M. on Thursday, August 21, will follow 9 A.M. opening exercises at which Doctor Hoffman and Governor Moore will be recognized.

Several afternoon meetings of scientific sections and affiliated societies will be held in Governor's

The 1971 Program Committee

Dr. Clark K. Sleeth of Morgantown is Chairman of the Program Committee for the 104th Annual Meeting of the West Virginia State Medical Association. Other members of the Committee are Drs. Robert D. Crooks and William E. Gilmore of Parkersburg; Carl B. Hall of Charleston; and David Z. Morgan of Morgantown.

Hall and the nearby Mountaineer Room, with other meetings in the Convention Unit.

Industrial and scientific exhibits will be located in the Exhibit Center in the West Virginia Wing, outside Governor's Hall and the Mountaineer Room.

Scientific Motion Pictures

Dr. David Z. Morgan of Morgantown, Chairman of the Scientific Motion Picture Program, has announced that medical films will be shown at 8 A.M. Thursday through Saturday in Governor's Hall, prior to the beginning of each general scientific session.

Formal Opening of the Convention

Doctor Callender will call the convention to order at 9 A.M. on Thursday in Governor's Hall, and will deliver a welcoming address.

The opening ceremonies will be followed by a first general session "Symposium on Cancer" with Dr. Curtis P. Artz, Professor and Chairman of the Department of Surgery, Medical University of South Carolina, in Charleston as Moderator.

Other speakers will include Dr. Paul H. O'Brien, Associate Professor of Surgery and Director of the Cancer Clinic, Medical University of South Carolina; Dr. Walter Lawrence, Professor of Surgery and Director of the Cancer Clinic, Virginia Commonwealth University, Richmond; and these two additional Medical University of South Carolina staff members: Dr. Keene M. Wallace, Professor of Radiology and Chairman of the Division of Radiotherapy; and Dr. H. Biemann Othersen, Associate Professor of Surgery and Chairman of the Division of Pediatric Surgery.

Thursday Afternoon Program

The Thursday afternoon program will feature an "Open Forum" at 3 o'clock in Governor's Hall, with Doctor Callender presiding. It will follow a 2 P.M. meeting of the Resolutions Committee, with Dr. Richard W. Corbitt of Parkersburg in charge, in the West Virginia Room; and an open meeting of the West Virginia State Society of Allergy, also at 2 o'clock, in the Fillmore and Van Buren rooms with Dr. Martin D. Reiter of Wheeling presiding.

The forum session is intended to give physicians opportunities to discuss various problems affecting the profession, including peer review; malpractice; third-party programs; health manpower; foundations; the practicing physician's relations with the West Virginia University Medical Center, and others.

Luncheon for Past Presidents

A luncheon honoring past presidents of the West Virginia State Medical Association will be held at The Greenbrier on Thursday, August 19, during the 104th Annual Meeting.

Dr. Maynard P. Pride of Morgantown, Immediate Past President, will preside, and invitations have been extended to all the Association's living past presidents.

Harry S. Weeks, Jr., M. D.
President Elect

Friday Morning Program

The West Virginia Academy of Ophthalmology and Otolaryngology will have an 8:15 A.M. breakfast meeting Friday in the Washington Room of the Virginia Wing.

The second general scientific session will follow at 9:30 A.M. in Governor's Hall with Dr. Carl B. Hall of Charleston serving as Moderator. Speakers and their topics will be:

R. R. Hannas, Jr., M. D., Vice Chairman of the Board of Directors of the American College of Emergency Physicians, Kansas City, Missouri, "Emergency Department: New Field of Practice."

J. C. Willke, M. D., and Barbara N. Willke, R. N., Cincinnati, Ohio, "The Family Physician's Role in Sex Education."

Jay M. Arena, M. D., Professor of Pediatrics and Director of the Poison Control Center, Duke University School of Medicine, Durham, North Carolina, "Management of Acute Poisoning."

Friday Afternoon Program

Beginning at 2 P.M. Friday, several scientific sections, societies and associations affiliated with the State Medical Association will have business meetings and/or scientific programs.

Dr. James T. Hughes of Ripley will preside at a meeting of the Section on Internal Medicine in

Hon. Arch A. Moore, Jr.
Governor of West Virginia

Governor's Hall. Dr. Barbara Jones of Morgantown will be in charge of a meeting of the Section on Pediatrics and the West Virginia Chapter, American Academy of Pediatrics, in the Tyler Room. Doctor Arena will speak on "Useful and Specific Antidotes in Poisonings" at the Pediatrics meeting.

Doctor Wallace will speak on "Computerized Radiation Tosemitry" at a West Virginia Radiological Society meeting in the Jackson Room, with Dr. Berthold Goerlich of Elkins presiding.

Dr. Harold N. Kagan of Huntington will be in charge of a Section on Urology meeting in the West Virginia Room, with Residents in Urology at Charleston Memorial Hospital presenting the program.

Presiding for a Section on Neurology, Neurosurgery and Psychiatry meeting in the Director's Room will be Dr. Thomas S. Knapp of Charleston. Dr. Jose A. Gutrecht, Associate Professor of Neurology, West Virginia University School of Medicine in Morgantown, will speak on "EEG in Psychiatry."

Dr. Warren D. Elliott of Beckley will be in charge of the West Virginia Obstetrical and Gynecological Society meeting in the Fillmore and Van Buren rooms.

Dr. Curtis Artz will speak on "Newer Concepts in the Treatment of Burns" at the Section on Surgery meeting in the Mountaineer Room, with Dr. Lewis D. Telle of Parkersburg presiding.

The Section on Orthopedic Surgery will hear an address on "Total Hip Arthroplasty" by Dr. John L. Sbarbaro, Jr., Professor of Orthopedic Surgery, University of Pennsylvania School of Medicine, in Philadelphia. Dr. Nicholas D. Zambos of Beckley will preside over the section meeting at 2:30 P.M. in the Virginia Wing's Washington Room.

Dr. John M. Hartman of Charleston will be in charge of the 3:30 P.M. business meeting of the West Virginia Chapter, American Society of Internal Medicine, in Governor's Hall.

The West Virginia District Branch, American Psychiatric Association, also will hold a 3:30 P.M. business meeting, with Dr. Stephen D. Ward of Wheeling presiding, in the Director's Room.

Doctor Richard W. Corbitt will preside over a meeting of the Committee on Nominations at 5 P.M. Friday in the Lee Room of the Virginia Wing.

Convention Timetable

The first general scientific session will begin at 9 A.M. on Thursday, August 19. The Friday session will begin at 9:30 A.M., and the session on Saturday, also at 9:30 A.M.

The first session of the House of Delegates will be on Wednesday afternoon, August 18, beginning at 3 o'clock. The second session will be on Saturday afternoon beginning at 2:30 o'clock.

The Exhibit Center will be open from 8:30 A.M. to 3:30 P.M. on Thursday and Friday and from 8:30 A.M. to 1 P.M. on Saturday.

Saturday Morning Program

A "Symposium on Post-Operative Respiratory Failure," with Dr. David Morgan as Moderator, will make up the third and final general scientific session beginning at 9:30 A.M. on Saturday. The speakers and their topics:

Dr. Herman Turndorf, Professor and Chairman of the Department of Anesthesiology, WVU School of Medicine, "The Spectrum of Postoperative Respiratory Failure."

Dr. John R. Bowers, Assistant Professor of Anesthesiology, WVU School of Medicine, "Early Diagnosis of Respiratory Complications."

Dr. El Sayed-Hegab, Associate Professor of Anesthesiology, WVU School of Medicine, "Artificial Ventilation: Its Indications and Some of Its Problems."

Dr. Erdogan Tercan, Department of Anesthesiology, WVU School of Medicine, in charge of case presentation and a question-and-answer period.

House of Delegates To Meet Twice During Meeting

The first session of the House of Delegates during the Annual Meeting at The Greenbrier will be convened at 3 P.M. on Wednesday, August 18. The second and final session of the House of Delegates will be held at 2:30 P.M. on Saturday, August 21.

Second House of Delegates Session

Doctor Callender will preside and will present his Presidential Address at the House of Delegates' second and final session at 2:30 P.M. in Chesapeake Hall.

The program also will bring the installation of Dr. Harry S. Weeks, Jr., of Wheeling as the State Medical Association's new President; and the election of other officers for the coming year.

Medical School Alumni Events

Alumni associations of three schools of medicine will hold cocktail parties on Thursday evening for their graduates. Dr. Clark K. Sleeth of Morgantown will be in charge of the WVU School of Medicine Alumni Association's party.

Dr. E. L. Crumpacker of White Sulphur Springs will have a similar role for a party arranged by the University of Virginia Alumni Fund, Medical Division; and the West Virginia Chapter, Medical College of Virginia, will be the third group to have a social hour. Dr. Thomas P. Long of Man will be in charge of this function.

Friday Night Auxiliary Dance

The Woman's Auxiliary to the State Medical Association will sponsor a "Le Papillon" in Chesapeake Hall at 10 P.M. Friday, with the Auxiliary to the Eastern Panhandle Medical Society serving as hostess.

Saturday Evening Reception

New officers of the State Medical Association will be honored at a cocktail party and reception from 6:30 until 7:30 P.M. Saturday on the Chesapeake Hall Terrace. Cordially invited to attend are all members of the Association and Auxiliary and their families; representatives of the industrial and scientific exhibitors, and convention guests.

Industrial and Scientific Exhibits

Many interesting industrial and scientific exhibits again will be on display during the convention in the Exhibit Center. Physicians, members of the Auxiliary and their guests are urged to visit the Center, to be open each day from 8:30 A.M. to 3:30 P.M. Thursday and Friday, and from 8:30 A.M. to 1 P.M. on Saturday.

Heavy Registration

Advance registration for the meeting has been heavy, in line with usual trends. As this issue of *The Journal* went to press, more than 650 persons had made reservations at The Greenbrier, with total registration expected to surpass 700.

No Convention Registration Fee

No registration fee will be charged either members or guests in connection with the 104th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 19-21, 1971.

Nominating Committee To Meet On Friday, August 20

The Committee on Nominations of the State Medical Association will meet on Friday, August 20, during the Annual Meeting at The Greenbrier.

The Committee will consider and recommend to the House of Delegates prior to the election of officers, at its final session, nominations for the offices of president elect, vice president, treasurer, and delegate and alternate to the American Medical Association.

The By-Laws of the Association specify that additional nominations may be made from the floor for the various offices.

Dr. Richard W. Corbitt of Parkersburg will serve as Chairman of the Committee on Nominations. Other members of the Committee are as follows: Drs. Stephen D. Ward of Wheeling; George A. Curry of Morgantown; Carl A. Liebig of Keyser; J. D. H. Wilson of Clarksburg; Joseph B. Reed of Buckhannon; A. Thomas McCoy of Charleston; and John J. Mahood of Bluefield.

AMA Installs Nevada Surgeon As Its 126th President

The American Medical Association installed Dr. Wesley W. Hall of Reno, Nevada, as its 126th President during its 120th Annual Meeting in Atlantic City, New Jersey, in June.

Doctor Hall, a surgeon, succeeded Dr. Walter C. Bornemeier of Chicago, Illinois. Along with choosing Dr. C. A. (Carl) Hoffman of Huntington as its President Elect, the AMA's House of Delegates elected Dr. Ralph C. Teall of Sacramento, California, as Vice President.

Doctor Russell B. Roth of Erie, Pennsylvania, and Dr. J. Frank Walker of Atlanta, Georgia, won re-election as Speaker and Vice Speaker, respectively, of the House.

Dr. John M. Chenault of Decatur, Alabama; Dr. Raymond T. Holden of Washington, D. C., and Dr. John R. Kernodle of Burlington, North Carolina, were re-elected to the Board of Trustees.

Also elected to the Board were Dr. Jere W. Annis of Lakeland, Florida, to succeed Doctor Hoffman; Dr. Donald E. Wood of Indianapolis, Indiana, to succeed Dr. L. O. Simenstad of Osceola, Wisconsin, who was ineligible for re-election; and Dr. Robert B. Hunter of Secro Woolley, Washington, to fill the unexpired term of Dr. Burtis E. Montgomery of Harrisburg, Illinois, who resigned.

At an organizational meeting after the final House of Delegates session, the Trustees re-elected Dr. Max H. Parrott of Portland, Oregon, as Chairman and Doctor Kernodle as Vice Chairman. Doctor Chenault was elected AMA Secretary-Treasurer and Secretary of the Board, to succeed Doctor Hoffman.

Chest Conference To Deal With Lung Diseases

The Fifth Mid-Winter Conference on Chest Disease on Sunday, January 30, 1972, at Charleston's Daniel Boone Hotel will offer a series of papers on "New Developments in Lung Diseases," the Planning Committee has announced.

The Conference Co-Chairmen, Drs. Ralph H. Nestmann and Joseph T. Skaggs, both of Charleston, said that the Committee hopes to arrange presentations on the following topics:

"New Drugs in the Treatment of Tuberculosis;" "The Value of Lung Scans in Clinical Medicine;" "The Care of the Tuberculosis Patient in a General Hospital;" "Emergency Treatment of Acute Resiratory Diseases," and "The Role of a Respiratory Intensive Care Unit."

The Conference will be sponsored by the West Virginia Thoracic Society; the West Virginia State Medical Association; the West Virginia Tuberculosis and Respiratory Disease Association, and West Virginia University's Medical Center.

The program will begin at 10 A.M. and continue until 4 P.M., with a recess for a buffet luncheon. The registration fee for physicians again will be $10.

Further details, including speakers, will be listed in later issues of *The Journal.*

Internal Revenue Survey Results Outlined

An Internal Revenue Service survey of 8,400 health care providers who participated during 1968 in Medicare and Medicaid, including physicians and dentists, revealed that 83 per cent reported their receipts correctly.

Fifteen per cent of all taxpayers in the study under-reported receipts by an average of $7,700, according to the IRS, and two per cent over-reported, by an average of $16,000.

The survey was based in the main on providers of care who, as individuals, received $25,000 or more from Federal programs. Some 15,000 providers were involved in the study, but the 8,400 studied in detail were selected by a "scientific sampling process," the IRS said.

Forty-seven cases have been referred to the Intelligence Division for preliminary or full-scale tax fraud investigation. However, the IRS spokesman noted that these results do not necessarily hold true for the entire health care profession.

Grant Approved for WVU Study

The U. S. Department of Health, Education and Welfare has approved a grant for $18,422 to Dr. Gale W. Rafter, Associate Professor of Biochemistry at the West Virginia University Medical Center in Morgantown, for a proposed study entitled "Mechanism of Pyrogen Elaboration in Blood Leukocytes."

'Open Forum' Scheduled During 104th Annual Meeting

One of the features of the 104th Annual Meeting at The Greenbrier will be an "Open Forum" type of session on Thursday afternoon, August 19.

Physicians will have an opportunity at this session to discuss various problems affecting the profession—such as peer review, malpractice, third-party programs, health manpower, foundations, the practicing physicians' relations with the WVU Medical Center, etc.

Dr. George R. Callender, Jr., the President, will serve as Moderator and other physicians who have had experience with the problems listed above will serve as a resource panel. Doctor Callender has emphasized that all physicians present at the meeting will be given an ample opportunity to express their views on any given subject.

AMA House Adopts Statement On Medical Care Access

The American Medical Association's House of Delegates elaborated on its existing policy regarding the right of access to medical care by adopting this statement during the AMA's Annual Meeting in Atlantic City, New Jersey, in June:

"It is the right of every citizen to have access to adequate medical care, but it is the responsibility of the citizen or of society to seek it. The American Medical Association will use all means at its disposal in an endeavor to make adequate medical care available to meet the needs of each person.

"In the spirit of inheritance of the Oath of Hippocrates, the AMA reaffirms its obligation to humanity. In this effort, the AMA cannot assume the responsibilities of government or the individual citizen. The AMA also recognizes the right of the physician to choose whom he will serve and the conditions under which he will render this service. These are integral essentials in the delivery of quality medical care."

Dr. Buford McNeer Completes National Security Course

Dr. Buford W. McNeer of Hinton completed a two-week Defense Strategy Seminar while on recent active duty for training as a Colonel in the U. S. Air Force Reserve at the National War College in Washington, D. C. The Seminar curriculum deals with major aspects of national security, and is based on a graduate-level War College course conducted each year for senior career officers on active duty in the various military services, along with certain civilian executives in various government agencies.

Looking Back 10 Years . . .

Dr. D. E. Greeneltch of Wheeling (center) was installed as President of the West Virginia State Medical Association during the Annual Meeting of 1961. Dr. Leonard W. Larson (right), then President of the American Medical Association, presided at the installation. At left is Dr. John W. Hash of Charleston, Doctor Greeneltch's predecessor.

Bluefield Physician Honored For Viet Nam Service

Dr. Robert W. Nielson, Jr., of Bluefield has been awarded a plaque by the American Medical Association's Volunteer Physicians for Viet Nam Program after serving his third voluntary tour of duty in that Southeast Asia nation in January-February, 1971.

The plaque was forwarded by the West Virginia State Medical Association to the Mercer County Medical Society, of which Doctor Nielson is a member, for appropriate presentation ceremonies. Doctor Nielson practices at the Bluefield Sanitarium.

Under the program for Viet Nam, the AMA has been asked to recruit 32 volunteer physicians each 60 days. They are assigned to the provincial hospitals and work with American and other free-world physicians who are in Viet Nam on a long-term basis; and through whom continuity in the program is assured.

A group of eight volunteer physicians departs each two weeks for a minimum 60-day tour, and to date, more than 800 American doctors have participated in the program.

AMA Woman's Auxiliary Elects, Installs New Officers

The Woman's Auxiliary to the American Medical Association chose Mrs. Robert F. Beckley of Lock Haven, Pennsylvania, as President Elect at its 48th Annual Convention in Atlantic City, New Jersey.

The Auxiliary installed Mrs. G. Prentiss Lee of Portland, Oregon, as its President during sessions held concurrently with the AMA's 120th annual sessions. The convention attracted 871 physicians' wives.

Doctor Hoffman First from State Elected to Head AMA

Next June, in San Francisco, Dr. C. A. (Carl) Hoffman will take office as the American Medical Association's 127th President, and its first from West Virginia.

The AMA's House of Delegates chose the Huntington urologist as President Elect at its Annual Meeting in Atlantic City in June, and he will succeed Dr. Wesley W. Hall, Reno, Nevada, surgeon, as President at the AMA's 1972 Annual Meeting.

Dr. Frank J. Holroyd of Princeton, one of West Virginia's two delegates to the AMA House, placed Doctor Hoffman's name in nomination and more than 15 seconds came from Delegates from other states.

"The several qualifications which must be identified with your selection to this high office are both varied and well defined," Doctor Holroyd told the House as West Virginia's other Delegate, Dr. Richard E. Flood of Weirton, listened. Doctor Holroyd continued:

"He must be a man of broad experience in the economic, social and political aspects of organized medical practice. He must possess and also demonstrate the qualities of administrative ability and leadership. He must be a man of personal integrity and sincerity of purpose and action. He must be both a planner and a doer. He must be in a position, as regards his professional practice, to make a nearly continuous sacrifice of time and effort on behalf of his constituents, both lay and professional."

Doctor Holroyd noted that most of the Delegates have learned to know and respect Doctor Hoffman during long years of professional activities on local, state and national levels. He then added:

"Doctor Hoffman has succeeded to the leadership of nearly every civic or professional organization in which he has held membership. His present activities and reputation for willingness to work, and determination to attain a maximum and ultimate benefit to the medical profession, and to those we serve, are well known and generally appreciated by the membership of the American Medical Association.

"At the present time he is a member of the Board of Trustees and Secretary-Treasurer of this Association. He also serves on several other national boards and commissions. Finally, he has the rare ability of lucid communication between organized medicine and the private and public segments of our nation."

Dr. Claude Welch, Boston surgeon and a member of the AMA's House of Delegates from Massachusetts, was the only other candidate for President Elect. Doctor and Mrs. Welch were among the first to congratulate Doctor and Mrs. Hoffman in the West Virginia suite after adjournment of the final House session at which the election results were announced.

State's Senior Citizens Voice Health Care Concerns

A concern for health care was expressed time and again by older West Virginians attending the Community Forums—White House Conference on Aging, sponsored by the West Virginia Commission on Aging, Dr. N. H. Dyer, State Director of Health, has noted.

By invitation of the Commission, the State Health Department's Bureau of Public Health Nursing participated in the Community Forums held throughout the State. The following comments were taken from reports submitted by the Bureau:

Major detriments to entering the health care delivery system are the lack of health personnel, and facilities for care. The 1970 census showed an increase of 12.5 percent in the 65-and-over population. Twenty-three of the fifty-five counties registered a range of 13.0-percent to 24.8-percent increases. Region III, comprising Boone, Kanawha, and Putnam Counties, logged the highest percent of increase—22.6 percent of persons 65 and over.

Legislation was enacted in West Virginia in 1966 authorizing the State Health Department to enter into agreements with local boards of health to provide home health services to residents of their counties or municipalities. County or municipal health departments which began or expanded existing programs, and met stipulated conditions for participation, became certified Home Health Agencies, qualifying for participation in Medicare. Although the largest age group of recipients is made up of those 65 and older, services provided are not confined to those receiving Medicare benefits.

Rather, home health services are provided to individuals of any age who are under the care of a physician and who require skilled nursing care or other services, such as part-time homemaker services, at home. Large numbers of the elderly are visited who, without home health services, would have to be in an institution. Many of these elderly citizens are proud, independent, and self-respecting people. They have worked hard all their lives, and they don't want charity from anyone, Doctor Dyer noted.

They want to stay in their homes, surrounded by the few possessions they treasure. For some, institutionalization would mean breaking their spirits. Some would deteriorate rapidly into senility. Others would die. And these tragedies would occur at much greater expense to the taxpayer than providing the needed services not being given to them. But there are some very real problems in the delivery of this kind of service, in this State as well as elsewhere. West Virginia's problems are typical, Doctor Dyer explained.

Unfortunately, home health services are provided through only 13 of the State's 55 county health departments. Even with nine non-official home health agencies, services are available to less than two-thirds of West Virginia's population. One three-county unit was forced to discontinue services last summer because of a lack of referrals by physicians, and lack of coverage by Medicare of services needed. Many others have had to limit services due to the lack of funds to hire qualified personnel.

Services also are uneven from county to county. Some counties are able to provide a range of services while others are not, and the priority of the Home Health Services program within the total program makes a difference in the extent to which services are offered. Continuity of care between the hospital or other care facilities and the home is a very real problem. Many people are not aware of the services in their community that are available to them. The regulations under Medicare have become increasingly restrictive, and in addition fiscal intermediaries do not interpret the regulations uniformly. The present regulations restrict reimbursement to acute phases of illness and do not provide for health services to prevent regression of the patient. Present regulations prohibit payment to home health agencies for preventive health service and the care of patients with chronic illness who have a limited potential for rehabilitation. The costs to Medicare are more in the long run with repeated hospitalization and institutionalization of these patients, Doctor Dyer stressed.

If health services can be expanded and improved to patients in their homes, some of the very real needs the elderly face in dealing with their health problems will be met, the State Health Director said. He also saw a need to change attitudes about the aging. Although study and research of the aging person have provided significant new information, the gap between knowledge and practice has remained very real. Planning, Doctor Dyer stressed, should include not only meeting the needs of our aging today, but also those in future generations. With increased emphasis on preventive medicine, and health maintenance programs throughout the life cycle, perhaps some of the problems of today's aging will not apply to future generations.

Such recommendations hopefully reflect the thinking of many people, and they might alleviate some of the most immediate needs in regard to the delivery of health care to the aging, particularly those who receive benefits from Medicare, Doctor Dyer said. He suggested the following for consideration:

Increase the amount and quality of out-patient and home health services; work toward uniform interpretation of Medicare policies; expand Medicare coverage to include prescription drugs; remove the three-day hospital stay requirement for home health benefits under Medicare, Part A; employ home health service coordinators to help provide continuous and appropriate levels of care through pre-discharge planning with physicians, patients, and families; certify patients for home health benefits prior to hospital discharge to insure continuous care and reimbursement to the home health agency; develop more health maintenance and preventive services for adults; work with physicians for increased and appropriate utilization of home health services; and establish more information and referral centers to inform people of services available in the community.

West Virginia Auxiliary Cited For AMA-ERF Efforts

The Woman's Auxiliary to the West Virginia State Medical Association has won a runner-up Award of Merit for its 1970-71 fund-raising efforts on behalf of the American Medical Association-Education and Research Foundation (AMA-ERF).

The West Virginia organization was recognized for providing the largest contribution per capita of $9.21 in the Eastern Region during the annual convention of the Woman's Auxiliary to the American Medical Association in Atlantic City, New Jersey, in June.

SAMA Health Team Works With Beckley Programs

Working with Mountaineer Family Health Plan programs in the Beckley area for nine weeks this summer is a five-member health team from the Student American Medical Association. A sixth student, in his second year of dental school, is working with the Southern West Virginia Regional Health Council's Dental Health Program.

Working under the direction of Dr. Forest Cornwell, Project-Medical Director for MFHP, are Miss Janet Ball, junior nursing student at the University of Kansas, and these medical students: Paul Dworkin of Johns Hopkins University in Baltimore, Maryland; Robert Rocco of the University of Vermont; Miss Sharon Hempler of the University of Kansas, and Mark Armstrong, Tulane University in New Orleans, Louisiana.

The team is a part of SAMA's Appalachian Project, which is funded partially by the Appalachian Regional Commission. The program is designed to help students in evaluations of health care systems, and in identification of their future health care roles.

Atlantic City Meeting Defines Preventive Medicine

The Board of Regents of the American College of Preventive Medicine, meeting in Atlantic City June 20, adopted this official definition of the term *Preventive Medicine*:

"*Preventive Medicine* is that branch of medicine which has primary interest in preventing physical, mental, and emotional disease and injury in contrast to treating the sick and injured. Secondarily, it is concerned with slowing the progress of disease and conserving maximal function."

Announcing the definition at the joint meeting of the American College of Preventive Medicine and the American Medical Association Section on Preventive Medicine, ACPM President William P. Richardson, M. D., Chapel Hill, North Carolina, said, "In an era when preventive medicine is being given emphasis greater than ever, a clear understanding of the term is essential for the medical profession, government, and the public."

Geriatrics Society Chooses Dr. Francis Rhoades

Francis P. Rhoades, M. D., family physician from Detroit, Michigan, was chosen President-Elect of the 8,000-member American Geriatrics Society at its recent 28th Annual Meeting in Chicago. He will succeed Irving S. Wright, M. D., New York City, who was installed as President of the organization of medical specialists and allied health personnel interested in geriatric medicine.

Other officers elected by the membership were: William W. Priddle, M. D., Toronto, Ontario, Canada, Vice President; Alton Ochsner, M. D., New Orleans, Louisiana, Treasurer, and Edward Henderson, M. D., New York City, Secretary.

Charles E. Lyght, M. D., Oklawaha, Florida, Immediate Past President, was elected Chairman of the Board of Directors.

Newly elected as members of the Board were; Brock E. Brush, M. D., Detroit; Austin B. Chinn, M. D., Heathsville, Virginia; Frederick G. Dorsey, M. D., Houston, Texas; Max A. Hammel, M. D., Santa Barbara, California, and William Reichel, M. D., Baltimore, Maryland.

WVU Radiologist Presents Paper on Brain Scans

A WVU Medical Center therapeutic radiologist recently presented a scientific paper that suggests atypical corpus callosum involvement as detected in brain scans may be a characteristic sign of malignant brain tumors.

Dr. Alptekin Ucmakli, Assistant Professor of Radiology in the Medical Center's Sections of Radiation Therapy and Nuclear Medicine, based his findings on the selection of authenticated cases obtained from more than 2,500 brain scans he interpreted and analyzed.

He presented his paper, entitled "Radionuclide Brain Scanning: The Pathological Significance of Involvement of Corpus Callosum in Brain Scans," during the June 28-July 2 18th Annual Meeting of the Society of Nuclear Medicine in Los Angeles.

Of his study's purpose, Doctor Ucmalki said, "Despite the unquestionable value of radioisotope scanning in the early detection of brain tumors, their non-specific nature . . . remains a serious drawback in clinical practice. The major differential lies between neoplastic and vascular lesions, and knowing which is of vital importance in deciding between neurosurgical intervention and medical conservative management."

Doctor Chambers To Head State Group

Dr. John T. Chambers of Charleston has been elected Chairman of the West Virginia Section of The American College of Obstetricians and Gynecologists, and will be installed during the annual meeting of District IV of the College in Norfolk, Virginia, in October. Dr. Chambers is President of the medical staff at Charleston Memorial Hospital.

Woman's Auxiliary To Hold 47th Annual Meeting

The Woman's Auxiliary to the West Virginia State Medical Association will hold its 47th Annual Meeting at The Greenbrier in White Sulphur Springs August 19-21, concurrently with the Annual Meeting of the Association.

Presiding at the women's sessions will be Mrs. Robert J. Tchou of Williamson, the Auxiliary's President. Special guests will include Mrs. G. Prentiss Lee, wife of a Portland, Oregon, general surgeon and President of the Woman's Auxiliary to the American Medical Association; and Mrs. Ramsay Hudson Moore of Dallas, Texas, President of the Woman's Auxiliary to the Southern Medical Association.

Mrs. G. Prentiss Lee

Mrs. Ramsay Hudson Moore

More than 200 wives of physicians are expected to attend the Auxiliary's business sessions.

Pre-Convention Meetings

Mrs. Tchou said that a cordial invitation has been extended to Auxiliary members to attend the first session of the Medical Association's House of Delegates at 3 P.M. on Wednesday, August 18, when the principal speaker will be Dr. Wesley W. Hall of Reno, Nevada, President of the American Medical Association.

Mrs. Tchou will be in charge, at 4 P.M. that day, of a Pre-Convention Board Meeting in the Fillmore and Van Buren Rooms.

Opening Convention Exercises

Members of the Auxiliary also have been invited to attend the formal opening of the 104th Annual Meeting of the State Medical Association at 9 A.M. on Thursday, August 19, in Governor's Hall. The speakers will be Dr. C. A. (Carl) Hoffman of Huntington, President-Elect of the American Medical Association, and the Hon. Arch A. Moore, Jr., Governor of the State of West Virginia.

After the opening exercises, Auxiliary members will go to the Fillmore and Van Buren Rooms for the formal opening of their convention, with Mrs. Tchou presiding.

First Business Session

The initial session, beginning at 9:45 A.M., will feature the keynote address by Mrs. G. Prentiss Lee. Dr. George R. Callender, Jr., of Charleston, President of the West Virginia State Medical Association, will be presented to the Auxiliary.

Other opening-session business will include the introduction of the convention chairmen, Mrs. Robert R. Pittman of Martinsburg and Mrs. R. M. Ferrell of Lewisburg; an in memoriam ceremony in charge of Mrs. Hu C. Myers of Philippi; reports of officers and committee chairmen; election of the 1972 Nominating Committee, and the presentation of component Auxiliary Presidents by the Regional Directors.

The Keynote Speaker

Mrs. Lee was installed in Atlantic City in June as President of the Woman's Auxiliary to the AMA. She is a native of Portland, Oregon, and a graduate of Reed College, and has been active for many years in Auxiliary and civic affairs.

She was President in 1961-62 of the Woman's Auxiliary to the Oregon Medical Association. Mrs. Lee likewise has served as President of the Woman's Auxiliary to the Multnomah County Medical Society in Oregon.

After receiving her undergraduate degree in sociology and education, she worked as a summer playground recreation supervisor; as a high school health and physical education teacher; as personnel supervisor for the WAVES, and as physical education instructor and head of that department at Reed College in Portland, Oregon.

Mrs. Lee's many civic activities have included membership on the Oregon State Board of Health Committee on Volunteer Services in Nursing Homes and Homes for the Aged; the National Congress of Parents and Teachers, and the Oregon Museum of Science and Industry Women's Committee.

Mrs. Lee and her husband are the parents of three sons, with one a pre-medical student at Willamette University in Oregon; another a Stanford University student, and the third a freshman at Lewis and Clark College in Portland.

Bridge Tournament

The Thursday afternoon, August 19, program will include a bridge tournament in the Trellis Lobby of The Greenbrier, with members of the Woman's Auxiliary to the Marion County Medical Society as hostesses.

At 8 A.M. on Friday, August 20, the Past Presidents' Breakfast is scheduled for the Director's Room, with Mrs. J. N. Jarrett of Oak Hill, Immediate Past President, presiding.

Second Business Session

Mrs. Tchou will preside at the Second General Session following at 9:45 A.M. on Friday in the Fillmore and Van Buren Rooms. Mrs. Ramsay Hudson Moore will be the principal speaker.

Other business will include the second reading of the Nominating Committee's report; reports of

various convention committees, and the election and installation of officers.

Mrs. G. Prentiss Lee will preside at the installation of officers, with Mrs. M. Bruce Martin of Huntington to succeed Mrs. Tchou as President. Mrs. Tchou will present the President's Pin and Gavel to Mrs. Martin; and Mrs. Jarrett will present the Past President's Pin to Mrs. Tchou.

The SMA Auxiliary President

Mrs. Moore is married to Dr. Ramsay Hudson Moore, a pediatrician who was founder, charter member and President of both the Dallas Pediatric Society and the Texas Pediatric Society. She has served as President of the Woman's Auxiliary to the Dallas County Medical Society, and was President of the Woman's Auxiliary to the Texas Medical Association in 1960-61.

Her many civic, cultural and community activities have included participation in Dallas Woman's Club and Garden Club programs; and with summer musical, safety and historical organizations.

Friday Social Functions

Members of the Woman's Auxiliary to the Parkersburg Academy of Medicine will be hostesses for golf on Friday afternoon, and members of the Auxiliary to the Eastern Panhandle Medical Society will play the same roles for a dance that evening.

Post-Convention Board Meeting

The Post-Convention Conference and Board Meeting will be held at 10 A.M. on Saturday, August 21, in the Fillmore and Van Buren Rooms with Mrs. Martin presiding.

Saturday Afternoon Program

Auxiliary members are invited to attend the second and final session of the State Medical Association's House of Delegates on Saturday afternoon at 2:30. Dr. George R. Callender, Jr., retiring President of the Association, will deliver his presidential address, and Dr. Harry S. Weeks, Jr., of Wheeling will be installed as President. Other Association officers for the coming year will be elected.

At 6:30 P.M. on Saturday, there will be a reception honoring the officers of the Medical Association on the Chesapeake Hall Terrace, with members of the Auxiliary cordially invited to attend.

Mrs. Robert J. Tchou

Chemical 'Trigger' Uncovered For Muscular Dystrophy

A researcher at the University of Maryland School of Medicine has reported what he thinks may be the chemical trigger for muscular dystrophy, according to the National Society for Medical Research.

Dr. Stephen R. Max, Assistant Professor of Biochemistry, described his study of lysosomal enzyme activity in connection with muscle atrophy in rats during the recent American Society of Biological Chemists meeting in San Francisco.

Doctor Max has concluded that lysosomes—often called the digestive tract of living cells—may have initiated atrophy in his animals because these enzymes can break down major constituents or living things such as proteins, carbohydrates, nucleic acids and fats.

He said other researchers have suspected that lysosomal enzyme activity has something to do with atrophy, but his work is the first detailed study of changes in the activity of these enzymes over a period of time under the conditions of disuse atrophy.

Muscle atrophy in rats was produced by immobilizing their legs. According to Doctor Max, there was a rise in lysosomal enzyme activity before any weight loss could be detected in the tissue. By the second day one lysosomal enzyme had increased to 180 per cent of the level found in control rats.

Weight loss was detectable by the third day, and by the seventh day the enzyme level in the immobilized muscle was four times that of the level in control muscle.

Doctor Max said his research may have implications for work with a number of more complicated muscular dystrophies and other neuromuscular disorders.

Change of Address

Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. Notices should be mailed to Box 1031, Charleston, West Virginia 25324.

Dr. Robert Crawford To Defend Medical Golf Crown

Dr. Robert A. Crawford, Charleston surgeon, is expected to be ready to defend the championship he won last year in the Annual Medical Golf Tournament which again will be held in conjunction with the West Virginia State Medical Association's 104th Annual Meeting.

Doctor Crawford shot a 75 to defeat Dr. Jack Leckie of Huntington by one stroke for low gross honors in the 18-hole, 1970 competition.

Awarded to the winner by Hospital and Physicians Supply Company of Charleston is a beautiful trophy which can be retained by any physician who wins the tournament three times.

Those physicians participating in the tournament must pay a $5 entry fee, Dr. Joseph A. Smith of Dunbar, the Director, has emphasized. Golfers may play their rounds during any morning or afternoon of the three-day meeting, but they must inform the starter when they begin their official 18 holes.

Also, all tournament play must be completed by 4 P.M. on Saturday, August 21. Prizes will be awarded that evening, during a reception honoring the Medical Association's new officers.

AMA's Doctor Wilbur Named To Defense Position

Dr. Richard S. Wilbur, Deputy Executive Vice President of the American Medical Association, has been nominated by President Nixon for the post of Assistant Secretary of Defense (Health and Environment).

The AMA Board of Trustees said during the AMA's 120th Annual Meeting in Atlantic City, New Jersey, that Doctor Wilbur would accept the position on a leave-of-absence basis for about one and one-half years.

The Board also said that Doctor Wilbur's "opportunity to serve his country at this time more than offsets the temporary loss of his staff contribution. We know that on his return the AMA will benefit enormously from the experience and contacts that he will have had in the Department of Defense."

April Examinations Scheduled By Family Practice Board

The American Board of Family Practice will give its next examination for certification in various centers throughout the United States over a two-day period on April 29-30, 1972. The deadline for receiving completed applications in the Board office is next February 1.

Information about the examination can be obtained from Nicholas J. Piscano, M. D., Secretary, American Board of Family Practice, Inc., University of Kentucky Medical Center, Annex No. 2, Room 229, Lexington, Kentucky 40506.

Medical Meetings

The following is a partial list of national, state and district medical meetings scheduled in the coming months.

1971

Aug. 19-21—104th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Aug. 23-26—Am. Hosp. Assn., Chicago.
Sept. 9-11—Am. Assn. of Ob.-Gyn., Hot Springs, Va.
Sept. 13-17—Int. Conf. on Coal Workers Pneumoconiosis, New York City.
Sept. 17-18—W. Va. Heart Assn., Clarksburg.
Sept. 20-24—Am. Acad. of Oph. and Otol., Las Vegas.
Sept. 21-23—Ky. Medical, Louisville.
Sept. 23—Rural Health Conference, Jackson's Mill.
Sept. 23-25—Central Assn., Ob.-Gyn., White Sulphur Springs.
Oct. 1-8—AAGP, Miami Beach.
Oct. 11-14—Ind. Medical, Indianapolis.
Oct. 14-17—Va. Medical, Arlington.
Oct. 16-21—Am. Acad. of Ped., Chicago.
Oct. 16-20—Am. Soc. of Anes., Atlanta.
Oct. 18-22—ACS, Atlantic City.
Oct. 24-28—Am. Col. of Chest Phys., Philadelphia.
Oct. 31-Nov. 4—Sou. Med. Assn., Miami Beach.
Nov. 3-6—Am. Soc. of Cyt., Washington.
Nov. 8-11—Pa. Medical, Lancaster.
Nov. 9-16—Am. Heart Assn., Anaheim, Calif.
Nov. 28-Dec. 1—AMA Clinical, New Orleans.
Dec. 4-9—Am. Acad. of Derm., Chicago.
Dec. 5-7—Am. Society of Hema., San Francisco.
Dec. 6-8—Sou. Surg. Assn., Hot Springs, Va.

1972

Jan. 24-26—Soc. of Thoracic Surg., San Francisco.
Jan. 30—5th Mid-Winter Conf. on Chest Diseases, Charleston.
Feb. 4-12—Am. Soc. of Clin. Path. & Col. of Am. Path., Atlanta.
Feb. 5-6—AMA Cong. on Med. Educ., Chicago.
March 1-5—Am. Col. of Cardiology, Chicago.
March 2-4—Central Surg. Assn., Chicago.
March 6-7—Int. Acad. of Path., Chicago.
March 27-30—Southeastern Surg. Cong., Washington.
April 3-8—Am. Col. of Rad., Bal Harbour, Fla.
April 13-18—Am. Derm. Assn., Dorado Beach, P. R.
April 16-20—Am. Assn. of Neu. Surg., Boston.
April 16-21—ACP, Atlantic City.
April 17-20—Am. Col. of Ob. & Gyn., Chicago.
April 21-23—W. Va. Chapter, AAGP, Charleston.
April 24-29—Am. Acad. of Neurology, St. Louis.
April 26-29—Am. Ped. Soc., Atlantic City.
April 26-29—W. Va. Acad. of Oph. and Otol., White Sulphur Springs.
May 1-3—Am. Assn. for Thoracic Surgery, Los Angeles.
May 1-5—Am. Psy. Assn., Washington.
May 3-5—Maryland Medical, Baltimore.
May 3-6—W. Va. Chap., ACS, White Sulphur Springs.
May 6—Am. Col. of Psy., Dallas.
May 8-12—Ohio Medical, Cincinnati.
May 18-20—Am. Gyn. Soc., Hot Springs, Va.
May 21-24—Am. Thoracic Soc., Kansas City.
May 22-25—Am. Urol. Assn., Washington.
June 8-14—Am. Rheumatism Assn., Dallas.
June 18-22—AMA, San Francisco.
June 24-25—Am. Diabetes Assn., San Francisco.
July 5-10—Int. Col. of Surg., Lake George, N. Y.
Aug. 7-10—Am. Hosp. Assn., Chicago.
Aug. 24-26—105th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

CONVENTION PROGRAM

104th Annual Meeting

of the

West Virginia State Medical Association

THE GREENBRIER, WHITE SULPHUR SPRINGS
August 19-21, 1971

WEDNESDAY MORNING

August 18

(Eastern Daylight Time)

9:00-5:00—Registration, Main Floor Lobby.

10:00—Pre-Convention Meeting of the Council. Maynard P. Pride, M. D., *presiding* (Lee Room, Virginia Wing).

WEDNESDAY AFTERNOON

3:00—First Session of the House of Delegates. George R. Callender, Jr., M. D., *presiding* (Chesapeake Hall).

Invocation—Carl B. Hall, M. D.

Address: Wesley W. Hall, M. D., President, American Medical Association.

Presentation of AMA-ERF Check to the West Virginia University School of Medicine.

Business Meeting.

WEDNESDAY EVENING

6:30-7:30—President's Reception honoring Gov. and Mrs. Arch A. Moore, Jr., and Dr. and Mrs. Carl Hoffman (Chesapeake Terrace).

THURSDAY MORNING

August 19

8:00—Motion Pictures. David Z. Morgan, M. D., *in charge* (Governor's Hall).

8:30-5:00—Registration, Main Floor Lobby.

Opening Exercises

(Governor's Hall)

9:00—Call to Order—George R. Callender, Jr., M. D., President, West Virginia State Medical Association.

Invocation—William E. Gilmore, M. D.

Address of Welcome—George R. Callender, Jr., M. D.

Recognition of Dr. C. A. (Carl) Hoffman of Huntington, President Elect of the American Medical Association; and the Hon. Arch A. Moore, Jr., Governor of the State of West Virginia.

First General Session

"Symposium on Cancer"

Moderator: Curtis P. Artz, M. D.,

Professor and Chairman of the Department of Surgery, Medical University of South Carolina, Charleston.

9:45—Paul H. O'Brien, M. D., Associate Professor of Surgery and Director of the Cancer Clinic, Medical University of South Carolina, Charleston. Subject: "Current Status of Chemotherapy."

Walter Lawrence, M. D., Professor of Surgery and Director of the Cancer Clinic, Virginia Commonwealth University, Richmond. Subject: "Current Status of Breast Cancer."

Keene M. Wallace, M. D., Professor of Radiology and Chairman of the Division of Radiotherapy, Medical University of South Carolina, Charleston. Subject: "The Present Place of Radiotherapy."

H. Biemann Othersen, M. D., Associate Professor of Surgery and Chairman of the

Division of Pediatric Surgery, Medical University of South Carolina, Charleston. Subject: "Current Advances in Pediatric Cancer."

Panel Discussion and Question and Answer Period (There will be a recess for visiting exhibits during the morning session).

12:30—Recess for Lunch and Visiting Exhibits.

12:30—Luncheon Honoring Past Presidents of the West Virginia State Medical Association. Maynard P. Pride, M. D., *presiding* (Tyler Room).

THURSDAY AFTERNOON

2:00—Resolutions Committee. Richard W. Corbitt, M. D., *presiding* (West Virginia Room).

2:00—Open Meeting, West Virginia State Society of Allergy. Martin D. Reiter, M. D., *presiding* (Fillmore and Van Buren Rooms).

3:00—"Open Forum." George R. Callender, Jr., M. D., will serve as Moderator at this session which is intended to give physicians an opportunity to discuss various problems affecting the profession—such as peer review, malpractice, third-party programs, health manpower, foundations, the practicing physicians' relations with the WVU Medical Center, etc. (Governor's Hall).

6:00—Cocktail Party. West Virginia University School of Medicine Alumni Association. Clark K. Sleeth, M. D., *in charge* (Fillmore and Van Buren Rooms).

6:00—Cocktail Party. University of Virginia Alumni Fund, Medical Division. E. L. Crumpacker, M. D., *in charge.*

6:30—Cocktail Party. W. Va. Chapter, Medical College of Virginia Alumni Association. Thomas P. Long, M. D., *in charge* (Old White Club).

FRIDAY MORNING

August 20

8:00—Breakfast Meeting, W. Va. Academy of Ophthalmology and Otolaryngology. (Washington Room, Virginia Wing).

8:00—Motion Pictures. David Z. Morgan, M. D., *in charge* (Governor's Hall).

8:30-5:00—Registration, Main Floor Lobby.

Second General Session

Moderator: Carl B. Hall, M. D.

9:30—R. R. Hannas, Jr., M. D., Vice Chairman of the Board of Directors of the American College of Emergency Physicians, Kansas City, Missouri. Subject: "Emergency Department: New Field of Practice."

10:15—J. C. Willke, M. D., and Barbara N. Willke, R. N., Cincinnati, Ohio. Subject: "The Family Physician's Role in Sex Education."

11:00—Recess for Visiting Exhibits.

11:30—Jay M. Arena, M. D., Professor of Pediatrics and Director of the Poison Control Center, Duke University School of Medicine, Durham, North Carolina. Subject: "Management of Acute Poisoning."

12:15—Recess for Lunch and Visiting Exhibits.

FRIDAY AFTERNOON

2:00—Section on Internal Medicine. James T. Hughes, M. D., *presiding* (Governor's Hall).

2:00—Section on Pediatrics and W. Va. Chap., American Academy of Pediatrics. Barbara Jones, M. D., *presiding* (Tyler Room).

Guest Speaker: Jay M. Arena, M. D., Durham, N. C. Subject: "Useful and Specific Antidotes in Poisonings."

2:00—West Virginia Radiological Society. Berthold Goerlich, M. D., *presiding* (Jackson Room).

Guest Speaker: Keene M. Wallace, M. D., Charleston, S. C. Subject: "Computerized Radiation Tosemitry."

2:00—Section on Urology. Harold N. Kagan, M. D., *presiding* (West Virginia Room).

Program will be presented by Residents in Urology at Charleston Memorial Hospital.

2:00—Section on Neurology, Neurosurgery and Psychiatry. Thomas S. Knapp, M. D., *presiding* (Director's Room).

Guest Speaker: Jose Gutrecht, M. D., Associate Professor of Neurology, West Virginia University School of Medicine, Morgantown. Subject: "EEG in Psychiatry."

2:00—West Virginia Obstetrical and Gynecological Society. Warren D. Elliott, M. D., *presiding* (Fillmore and Van Buren Rooms).

2:00—Section on Surgery. Lewis D. Telle, M. D., *presiding* (Mountaineer Room).

Guest Speaker: Curtis P. Artz, M. D., Charleston, S. C. Subject: "Newer Concepts in the Treatment of Burns."

2:30—Section on Orthopedic Surgery. Nicholas D. Zambos, M. D., *presiding* (Washington Room, Virginia Wing).

Guest Speaker: John L. Sbarbaro, Jr., M. D., Professor of Orthopedic Surgery, University of Pennsylvania School of Medicine,

Philadelphia. Subject: "Total Hip Arthroplasty."

3:30—W. Va. Chapter, American Society of Internal Medicine. John M. Hartman, M. D., *presiding* (Governor's Hall).

Business Meeting.

3:30—W. Va. District Branch, American Psychiatric Association. Stephen D. Ward, M. D., *presiding* (Director's Room).

Business Meeting.

5:00—Committee on Nominations. Richard W. Corbitt, M. D., *presiding* (Lee Room, Virginia Wing).

FRIDAY EVENING

10:00—"Le Papillon" Dance sponsored by the Woman's Auxiliary. Hostess, Eastern Panhandle Auxiliary. Entertainment at the Intermission under the direction of Richard W. Corbitt, M. D. (Chesapeake Hall).

SATURDAY MORNING

August 21

8:00—Motion Pictures. David Z. Morgan, M. D., *in charge* (Governor's Hall).

9:00-2:00—Registration, Main Floor Lobby.

"Symposium on Post-Operative Respiratory Failure"

Moderator: David Z. Morgan, M. D.

9:30—Dr. Herman Turndorf, Professor and Chairman of the Department of Anesthesiology, WVU School of Medicine. Subject: "The Spectrum of Postoperative Respiratory Failure."

John R. Bowers, M. D., Assistant Professor of Anesthesiology, WVU School of Medicine. Subject: "Early Diagnosis of Respiratory Complications."

El Sayed-Hegab, M. D., Associate Professor of Anesthesiology, WVU School of Medicine. Subject: "Artificial Ventilation: Its Indications and Some of Its Problems."

Erdogan Tercan, M. D., Department of Anesthesiology, WVU School of Medicine. Case Presentation and Question and Answer Period.

(There will be a recess for visiting exhibits during the morning session).

SATURDAY AFTERNOON

2:30—Second and Final Session of the House of Delegates. George R. Callender, Jr., M. D., *presiding* (Chesapeake Hall).

Invocation—Dr. William A. Benfield, Minister, First Presbyterian Church, Charleston.

Presidential Address—George R. Callender, Jr., M. D., President, West Virginia State Medical Association.

Introduction of President of Woman's Auxiliary to the West Virginia State Medical Association.

Introduction of Honor Guests.

Business Meeting.

Election of Officers.

Installation of Harry S. Weeks, Jr., of Wheeling, as President of the West Virginia State Medical Association.

SATURDAY EVENING

6:30-7:30—Cocktail Party and Reception Honoring Officers of the West Virginia State Medical Association (Chesapeake Hall Terrace).

CONVENTION SPEAKERS

(Biographical Sketches)

Dr. Keene M. Wallace, Professor of Radiology and Head of the Division of Radiation Therapy at the Medical University of South Carolina, is a native of Washington, D. C.

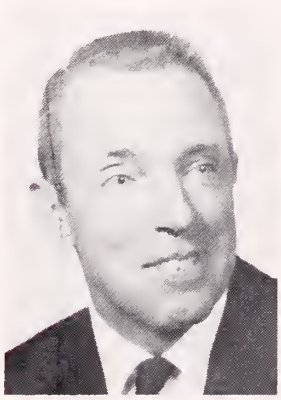
He was graduated from the University of Arizona and received his M. D. degree in 1944 from George Washington University School of Medicine. He interned at George Washington Hospital and served residencies at Doctors' Hospital and Walter Reed General Hospital in Washington, D. C.

Keene M. Wallace, M. D.

He served as a member of the faculty at George Washington University School of Medicine for two years and then one year as radiotherapist in Hurly Hospital at Flint, Michigan. He served from 1952 to 1966 as Head of the Radiotherapy Section at the Harrisburg Polyclinic Hospital in Harrisburg, Pennsylvania. He accepted his present position in 1967.

Doctor Wallace is a Diplomate of the American Board of Radiology and the American College of Radiology. He also is a member of the North American Radiologic Society, the American Radium Society and the Society of Nuclear Medicine.

Dr. R. R. Hannas, Jr., a native of New Brunswick, New Jersey, is Director of the Emergency Physicians Group at Research and Independence Hospitals in Kansas City. He is currently serving as Vice Chairman of the Board of Directors of the American College of Emergency Physicians.



R. R. Hannas, Jr., M. D.

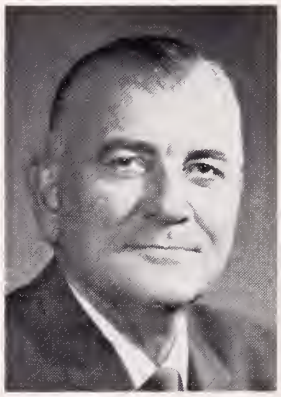
Doctor Hannas was graduated from Purdue University in 1939 and spent the next seven years with the United States Marine Corps. He resigned in 1946 as a Lieutenant Colonel to enter Harvard Medical School where he received his M. D. degree in 1950. He interned and served a one-year residency at the University of Kansas Medical Center in Kansas City.

He was engaged in general practice for twelve years in Sentinel, Oklahoma, and was active in the affairs of the Oklahoma State Medical Association. He was a member of that association's board of trustees for 10 years and also served as a contributing editor of the *Journal of the Oklahoma State Medical Association.*

Doctor Hannas left private practice to serve for three years as a full-time member of the staff of the American Academy of General Practice, where he was Director of the Division of Education. In conjunction with this assignment, he visited numerous medical schools in an advisory capacity and was active in defining the content of the new specialty of family practice and instrumental in assisting in its development.

Dr. Wesley W. Hall of Reno, Nevada, who was installed as President of the American Medical Association in Atlantic City in June, is a native of Lumberton, Mississippi.

Doctor Hall graduated from Mississippi College and received his M. D. degree in 1930 from the Tulane University School of Medicine. He interned and served a residency in surgery at Baroness Erlanger Hospital in Chattanooga, Tennessee. He is senior consultant in surgery, orthopedics and gynecology at Washoe Medical Center and St. Mary's Hospital in Reno.



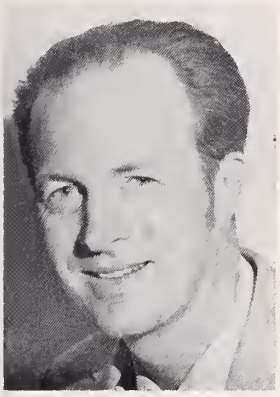
Wesley W. Hall, M. D.

He served as President of Nevada State Medical Association in 1960-61, and had previously served for two years as its Secretary-Treasurer. He is a Fellow of the American College of Surgeons, Southeastern Surgical Congress and International College of Surgeons.

Doctor Hall served as Nevada's delegate to the AMA's policy-making House of Delegates from 1952 until 1961, when he was elected a member of the AMA Board of Trustees. He served as Chairman of the Board from 1966 to 1968, and was named President Elect during the Annual Convention in Chicago last June.

He is a Squadron Commander of the Washoe Jeep Squadron, a search and rescue unit for the Civil Air Patrol and local police. He also is athletic team physician for Washoe County high schools and the University of Nevada.

Dr. Jack C. Willke attended Xavier University and received his M. D. degree in 1948 from the University of Cincinnati College of Medicine. He interned at Good Samaritan Hospital in Cincinnati and served with the Medical Corps of the United States Air Force, 1952-54. He has been engaged in the private practice of medicine in suburban Cincinnati since 1954.


Jack C. Willke, M. D.

He is a member of the Board of the Cincinnati Social Health Association and past member of the School Board, Archdiocese of Cincinnati (90,000 students). He is a member of the Cincinnati Academy of Medicine and Chairman of its Sex Education Committee, a member of the Ohio State Medical Association. He also is a member of the Southwestern Ohio Society of Family Physicians, the Ohio State and American Academy of General Practice.

He and Mrs. Willke are co-authors of a number of publications, including "The Wonder of Sex, How to Teach Children, A Guide for Parents and Teachers." More than 200,000 copies have been printed to date.

Mrs. Barbara H. Willke received B. S. and R. N. degrees in 1944 from the University of Cincinnati College of Nursing and Health. She served as an Instructor in the Department of Nursing Arts at St. Elizabeth Hospital in Dayton, Ohio, 1945-46, and took graduate work at the University of Dayton, 1946-47.

Barbara H. Willke, B.S., R.N.

Mrs. Willke served as Chairman of the Department of Nursing Arts at Jewish Hospital in Cincinnati in 1947 and as Chairman of the Department of Nursing Arts at Good Samaritan Hospital in Cincinnati, 1948-50. Since 1950 she has been a full-time wife and mother.

She and Doctor Willke were pioneers and past chair couple of the Cincinnati Family Life Bureau, as well as serving as Consultants in sex education for the public and parochial schools of Cincinnati. They are members of the National Council on Family Relations and members of the National Task Force formulating sex and family life education programs for the Catholic schools of the United States.

During the past few years Dr. and Mrs. Willke have lectured in a great many high schools, participated in countless seminars and counseled hundreds of youth in the area of sex education. In an average year they speak in 40 cities to over 50,000 people, and appear on almost 100 radio and TV programs.

Dr. Paul H. O'Brien, Associate Professor of Surgery and Director of the Cancer Clinic at the Medical University of South Carolina, is a native of Evanston, Illinois.

Paul H. O'Brien, M. D.

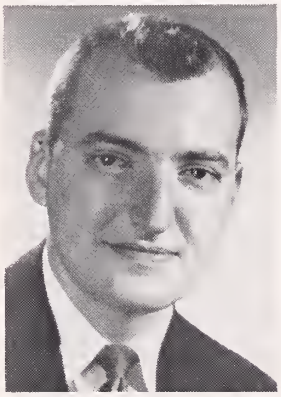
He was graduated from Northwestern University and received his M. D. degree in 1954 from Northwestern University Medical School. He interned at Wesley Memorial Hospital in Chicago, and served residencies at Cook County Hospital in Chicago and the Memorial Hospital for Cancer and Allied Diseases in New York City.

He served for two years with the Medical Corps of the United States Army and served on the faculties of the Cornell and Northwestern Medical Schools prior to accepting his present position in South Carolina.

Doctor O'Brien is a Diplomate of the American Board of Surgery and a member of the American College of Surgeons, the Association for Academic Surgery and the Southeastern Surgical Congress.

Dr. Walter Lawrence, Jr., Professor of Surgery and Chairman of the Division of Surgical Oncology, Medical College of Virginia, Richmond, is a native of Chicago.

He attended the University of Chicago, Dartmouth College and received his M. D. degree in 1948 from the University of Chicago School of Medicine. He interned at Johns Hopkins Hospital, 1948-49, and served residencies at that hospital and the Memorial Sloan-Kettering Cancer Center, 1951-56.


Walter Lawrence, Jr., M. D.

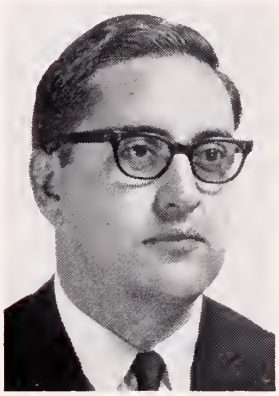
He was a member of the faculty at Cornell University Medical College from 1957 to 1966, at which time he accepted his present position.

He was Certified by the American Board of Sur-

gery in 1957 and he is a member of the American College of Surgeons, the Halsted Society and the Harvey Society. He also is a member of the American Surgical Association, American Association for the Advancement of Science and the Society of University Surgeons.

Dr. Jose A. Gutrecht, Associate Professor of Neurology at the West Virginia University School of Medicine, is a native of Argentina.

He was graduated in 1960 from the University of Buenos Aires Medical School and served a rotating internship at Buenos Aires Hospital. From 1960-62 he served as assistant physician in the Neurology Service at Pedro Fiorito Hospital in Buenos Aires and also during that period served as an Instructor in the Biology Department of the University of Buenos Aires.



Jose A. Gutrecht, M. D.

He served as a Fellow in Neurophysiology at the Mayo Clinic in Rochester, Minnesota, 1963-64, and for the next three years served as a Fellow in Neurology at the Mayo Clinic. He has been a member of the faculty at the WVU School of Medicine since 1967.

He is Certified by the American Board of Psychiatry and Neurology and by the Board of Qualification of the American Electroencephalography Society. In 1969 he received a Master's degree in neurology from the University of Minnesota School of Medicine. He is a member of the American Academy of Neurology and the American Epilepsy Society.

Dr. Curtis P. Artz, Professor and Chairman of the Department of Surgery at the Medical University of South Carolina, is a native of Jerome, Ohio.

He is a familiar figure in West Virginia as he began his medical practice in the State in 1941 in Grantsville, Calhoun County. He remained in Grantsville until 1945 when he entered a surgical residency at the Ohio State University Health Center in Columbus.

Curtis P. Artz, M. D.

Active in the affairs of organized medicine, Doctor Artz served as President of the Parkersburg Academy of Medicine in 1943 and as a member of the Council of the West Virginia State Medical Association, 1944-45.

Doctor Artz received B. A. and M. D. degrees from the Ohio State University School of Medicine, and a M. S. degree in 1951 from Baylor University School of Medicine. He interned at Baltimore City Hospitals, 1939-40, and served a mixed residency at Camden-Clark Memorial Hospital in Parkersburg, 1940-41. He also served residencies at Ohio State University Health Center and the Brooke Army Medical Center in Ft. Sam Houston, Texas.

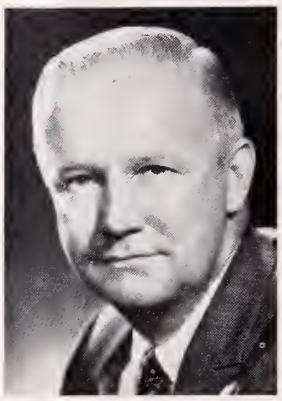
From 1951 to 1953 he served with the United States Army Surgical Research Units in this country and in Korea.

He then joined the University of Mississippi School of Medicine faculty in 1956 before accepting the position as Shrine Professor of Surgery at the University of Texas Medical Branch in 1963. He has been on the faculty at South Carolina since 1956.

Doctor Artz is a Diplomate of the American Board of Surgery, and a member of the American College of Surgeons and a number of other professional organizations. He is the author of numerous articles which have been published in scientific journals and also the author or co-author of nine books.

Gov. Arch A. Moore, Jr., of Glen Dale, served for 12 years in the U. S. House of Representatives before he was inaugurated as the 28th Governor of West Virginia in January, 1969.

Governor Moore was born in Moundsville and educated in the public schools of Marshall County. He was graduated from West Virginia University and received his Bachelor of Law (LL.B.) degree in 1951.



Gov. Arch A. Moore, Jr.

During World War II, Governor Moore served as a Combat Sergeant in the United States Army. He was the recipient of the Purple Heart as the result of severe wounds received on the battlefield.

Governor Moore was elected to the West Virginia House of Delegates in 1952 and in 1956 he was elected to the first of six consecutive terms in the United States Congress. During his service in Congress he became a ranking Republican member of the House Judiciary Committee and several other influential committees.

He is presently Republican National Committeeman from West Virginia and served as Chairman of the Sub-Committee in Charge of Rules and Procedures of the 1968 Republican National Convention.

He is married to the former Shelley Riley and they have three children.

Dr. H. Biemann Othersen, Associate Professor of Surgery at the Medical University of South Carolina, is a native of Charleston, South Carolina. He was graduated from the College of Charleston and received his M. D. degree in 1953 from the Medical University of South Carolina. He interned at Philadelphia General Hospital and served residencies at the University of Pennsylvania, Medical University of South Carolina, Children's Hospital in Columbus, Ohio, and Massachusetts General Hospital.

H. Biemann Othersen, M. D.

He was appointed Assistant Professor of Surgery at the Medical University of South Carolina in 1965 and was named Associate Professor of Surgery in 1968. He is currently serving as Chairman of the Department of Pediatric Surgery.

He served with the Medical Corps of the United States Navy for two years and is certified by the American Board of Surgery and the American Board of Thoracic Surgery. He is a member of the American College of Surgeons, the American Academy of Pediatrics and the Association for Acadamic Surgery.

He is a member of the Charleston County Medical Society, South Carolina Medical Association and the American Medical Association.

Dr. Jay M. Arena, Professor of Pediatrics and Director of the Poison Control Center at Duke University School of Medicine, is a native of Clarksburg.

Doctor Arena was educated in the public schools of Harrison County and attended the two-year School of Medicine at West Virginia University. He received his M. D. degree in 1932 from Duke University School of Medicine and interned at Strong Memorial Hospital in Rochester, New York, and Johns Hopkins in Baltimore. He served his residency at Duke Hospital.

Jay M. Arena, M. D.

He served as an instructor in pediatrics at Vanderbilt University School of Medicine before joining the faculty at Duke in 1937. He has been at Duke since that time and was appointed to his present position in 1956.

Doctor Arena is currently serving as President Elect of the American Academy of Pediatrics and is Past President of the American Association of Poison Control Centers. He also is a member of Phi Beta Kappa and Alpha Omega Alpha.

He is the author of six textbooks and more than 175 scientific articles published in scientific journals. He serves on the editorial boards of six professional journals.

Dr. Herman Turndorf, Professor and Chairman of the Department of Anesthesiology at the West Virginia University School of Medicine, is a native of Paterson, New Jersey.

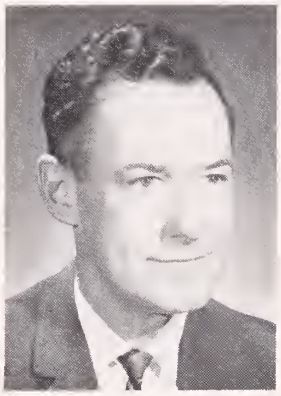
Herman Turndorf, M. D.

He was graduated from Oberlin College and received his M. D. degree in 1956 from the University of Pennsylvania School of Medicine. He interned and served a residency at the Hospital of the University of Pennsylvania. He served for two years as Associate Director of the Department of Anesthesiology at the U. S. Naval Hospital in Portsmouth, Virginia. He served as an Instructor in Anesthesiology at the Hospital of the University of Pennsylvania, 1957-59, and was Assistant Anesthetist at Harvard Medical School, 1961-63. He served as Clinical Professor of Anesthesiology at the Mt. Siani Medical School from 1966 until he accepted his present position in 1970.

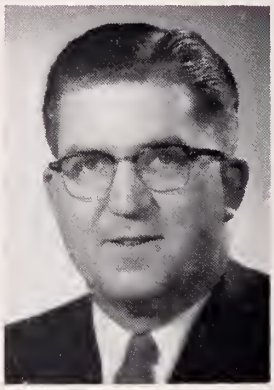
Doctor Turndorf was certified by the American Board of Anesthesiology in 1962 and he is a Fellow of the American College of Anesthesiology and the American College of Chest Physicians. He also is a member of the American Society of Anesthesiologists, New York Academy of Sciences and the American Thoracic Society.

1971 PROGRAM COMMITTEE

Clark K. Sleeth, M. D.
Morgantown
Chairman

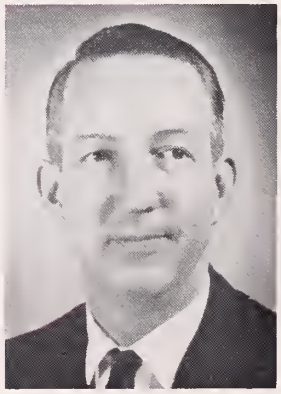


Robert D. Crooks, M. D.
Parkersburg



Carl B. Hall, M. D.
Charleston

William E. Gilmore, M. D.
Parkersburg



David Z. Morgan, M. D.
Morgantown

DELEGATES AND ALTERNATES

BOONE (2)—Delegates, Harold H. Howell, Madison; and W. V. Wilkerson, Whitesville. Alternate, J. M. Scott, Madison.

BROOKE (2)—Delegates, John W. Traubert, Wellsburg; and James E. Wise, Follansbee. Alternates, Ralph McGraw, Follansbee; and W. T. Booher, Jr., Wellsburg.

CABELL (10)—Delegates, Gerald E. Vanston, Gary G. Gilbert, Joseph E. Ricketts, Roy A. Edwards, Jr., Gilbert A. Ratcliff, M. Bruce Martin, A. C. Esposito, Wilson P. Smith, Harold N. Kagan and Jack O. Sheppe, Huntington. Alternates, James S. Klumpp, C. A. Hoffman, Charles M. Polan and Jack Leckie, Huntington.

CENTRAL WEST VIRGINIA (3)—Delegates, Rigoberto Ramirez and Joseph B. Reed, Buckhannon; and Clemente Diaz, Richwood. Alternates, C. R. Davisson, Weston; J. E. Echols, Richwood; and R. L. Chamberlain, Buckhannon.

EASTERN PANHANDLE (4)—Delegates, Leo H. T. Bernstein and William L. Rodgers, Martinsburg; Frank J. Jarsen, Charles Town; and Frank J. Gavlas, Martinsburg. Alternates, Jean P. Lucas, Martinsburg; S. Elizabeth McFetridge, Shepherdstown; William H. Wanger, Martinsburg; and Halvard Wanger, Shepherdstown.

FAYETTE (2)—Delegates, A. R. Bautista, Montgomery; and J. N. Jarrett, Oak Hill. Alternates, W. B. Davis, Rainelle; and W. T. Bittinger, Oak Hill.

GREENBRIER VALLEY (3)—Delegates, John J. Yaeger and G. S. Julias, White Sulphur Springs; and Jose B. Caringal, Ronceverte. Alternates, James P. Baker and Arnold J. Brody, White Sulphur Springs.

HANCOCK (3)—Delegates, Richard E. Flood, Myer Bogarad and J. L. Thompson, Weirton. Alternates, Milan J. Packovich, and A. A. Yurko, Jr., Weirton; and David S. Pugh, Chester.

HARRISON (4)—Delegates, Robert D. Hess, Bridgeport; Mehmet V. Kalaycioglu, Shinnston; George F. Evans and J. Keith Pickens, Clarksburg. Alternates, L. Dale Simmons, C. S. Harrison, J. D. H. Wilson, Herman Fischer, Clarksburg.

KANAWHA (16)—Delegates, R. S. Birckhead, Gauley Bridge; Jean P. Cavender, Jerill D. Cavender, W. Alva Deardorff, Carl B. Hall, George V. Hamrick and John M. Hartman, Charleston; George W. Hogshead, Nitro; Milton J. Lilly, Jr., Jimmie L. Mangus, A. Thomas McCoy, Seigle W. Parks, Page H. Seekford, G. A. Shawkey and Joseph T. Skaggs, Charleston; and Joseph A. Smith, Dunbar. Alternates, Jose A. Celis and Robert A. Crawford, Jr., Charleston; Donald E. Cunningham, St. Albans; Henry R. Glass, Jr., Daniel Hamaty, Elwood H. Heilman, J. A. B. Holt, William E. Lawton, Jr., and Ralph H. Nestmann, Charleston; Richard C. Rashid, South Charleston; Thomas G. Reed, Carl J. Roncaglione, James K. Sexton and Pat A. Tuckwiller, Charleston.

LOGAN (3)—Delegates, Thomas P. Long, Harold Van Hoose and Kermit C. Ericsson, Man. Alternates, Ray M. Kessel, Logan; A. A. Pelaez and J. A. Nordelo, Man.

MARION (4)—Delegates, Joseph D. Romino, Robert G. Janes, John L. Coyner and F. W. Mallamo, Fairmont.

MARSHALL (3)—E. Y. Baysal, Moundsville; and Kenneth J. Allen, Glen Dale. Alternates, David L. Ealy and William P. Bradford, Moundsville.

MASON (2)—Delegates, Aarom Boonsue and John M. Grubb, Pt. Pleasant. Alternates, Richard L. Slack and Dan Glassman, Pt. Pleasant.

McDOWELL (3)—Delegates, A. J. Villani, A. A. Carr and J. C. Ray, Welch. Alternates, D. Castrodale and R. O. Gale, Welch.

MERCER (5)—Delegates, Sam Milchin, Bluefield, Virginia; Henry F. Warden, Jr., Upshur Higginbotham and John J. Mahood, Bluefield. Alternates, R. O. Rogers, Jr., Everett L. Gage, Jr., and J. E. Blaydes, Jr., Bluefield.

MINGO (2)—Delegates, Robert J. Tchou and Arthur E. Levy, Williamson. Alternates, Andrew H. Henderson and Russell A. Salton, Williamson.

MONONGALIA (6)—Delegates, Alvin L. Watne, David Z. Morgan, Lawrance S. Miller, Thomas M. Howes, C. A. Logue and W. Gene Klingberg, Morgantown. Alternates, John L. Fullmer, Barbara Jones, H. Summers Harrison and James D. Martin, Morgantown.

OHIO (8)—Delegates, George R. Clarke, Milton E. Nugent, Alfred D. Ghaphery, Stephen D. Ward, Robert R. Weiler, M. D. Reiter, Donald H. Hofreuter and J. N. Aceto, Wheeling. Alternates, H. R. Holtrop, T. L. Ritz, W. E. McNamara, Nime K. Joseph, R. U. Drinkard, Charles H. Hiles, John P. Griffith, Jr., and Howard G. Weiler, Wheeling.

PARKERSBURG ACADEMY (6) — Delegates, William E. Gilmore, Richard W. Corbitt and Dwight P. Cruikshank, Parkersburg; Jack J. Stark, Belpre, Ohio; George E. McCarty and Edward Shupala, Parkersburg. Alternates, W. R. Yeager, Parkersburg; E. L. Thrasher, Sistersville; Lewis D. Telle, Paul G. Modie, Jr., and Lyle D. Vincent, Parkersburg.

POTOMAC VALLEY (3)—Delegates, Herbert P. Stellings, Romney; Robert W. Bess, Jr., Piedmont; and Carl A. Liebig, Keyser. Alternates, Robert W. McCoy, Jr., and Harry F. Coffman, Keyser; and Charles J. Sites, Franklin.

PRESTON (2)—Delegates, Del Roy R. Davis and Donald P. Brown, Kingwood. Alternates, Hilton Rocha, Hopemont; and William H. Harriman, Jr., Terra Alta.

RALEIGH (6)—Delegates, James A. Gardner, William D. McLean, John M. Daniel, C. Richard Daniel, Warren D. Elliott and Forest A. Cornwell, Beckley. Alternates, Walter E. Klingensmith, W. H. Rardin, Charles W. Nelson, Jr., Richard G. Starr and James A. Barnes, Beckley.

SUMMERS (2)—Delegates, Jack D. Woodrum and Buford W. McNeer, Hinton. Alternates, A. W. Holmes and D. W. Ritter, Hinton.

TYGART'S VALLEY (4)—Delegates, Charles L. Leonard and A. E. Harrington, Elkins; and A. Kyle Bush, Philippi. Alternates, Hu C. Myers, Philippi; L. H. Nefflen and Harold L. Jellinek, Elkins.

WETZEL (2)—Delegates, Terrell Coffield, New Martinsville; and Allen M. Dyer, Jr., Pine Grove. Alternates, Kent M. Hornbrook and John O. Theiss, New Martinsville.

WYOMING (2)—Delegates, Francisco Flores and Ernesto M. Fabi, Mullens. Alternate, Ernest Poral, Mullens.

Reception Committee

JAMES S. KLUMPP, *Chairman*

C. A. Hoffman
Frank J. Holroyd
Thomas G. Reed
Richard E. Flood

A. C. Esposito
Harry S. Weeks, Jr.
Stephen D. Ward
Clark K. Sleeth

William E. Gilmore
Bernard Zimmermann
Lewis D. Telle
Alvin L. Watne

Berthold Goerlich
Andrew W. Goodwin, II
J. Dennis Kugel
W. Alva Deardorff
David B. Gray

S. William Goff
A. Kyle Bush
Kermit C. Ericsson

Thomas P. Long
Carl B. Hall
R. S. Birckhead
Barbara Jones

W. Gene Klingberg
George F. Evans
Jack Leckie
Seigle W. Parks

A. Thomas McCoy
Richard W. Corbitt
L. J. Pace
Maynard P. Pride

Richard V. Lynch, Jr.
Kenneth G. MacDonald
Worthy W. McKinney

Official Program

WOMAN'S AUXILIARY

to the

West Virginia State Medical Association

47th Annual Meeting

THE GREENBRIER

White Sulphur Springs

August 19-21, 1971

WEDNESDAY AFTERNOON

August 18

3:00—First Session of the House of Delegates, State Medical Association (Chesapeake Hall).

Address by Wesley W. Hall, M. D., President of the American Medical Association.

(Auxiliary Members are invited and urged to attend).

4:00—Pre-Convention Board Meeting. Mrs. Robert J. Tchou, President, *presiding* (Fillmore and Van Buren Rooms).

WEDNESDAY EVENING

6:30-7:30—President's Reception honoring Gov. and Mrs. Arch A. Moore, Jr., and Dr. and Mrs. Carl Hoffman (Chesapeake Hall Terrace).

THURSDAY MORNING

August 19

9:00—Formal Opening of the 104th Annual Meeting of the West Virginia State Medical Association (Governor's Hall).

Recognition of Dr. C. A. (Carl) Hoffman of Huntington, President Elect of the American Medical Association; and Hon. Arch A. Moore, Jr., Governor of the State of West Virginia.

9:45—Address by Dr. Curtis P. Artz, Professor and Chairman of the Department of Surgery, Medical University of South Carolina. Doctor Artz will be Moderator for a "Symposium on Cancer."

9:45—Formal Opening of the Convention. Mrs. Robert J. Tchou, President, *presiding* (Fillmore and Van Buren Rooms).

Invocation and Pledge of Loyalty—Mrs. George A. Curry.

Welcome—Mrs. Robert R. Pittman.

Response—Mrs. Charles S. Harrison.

Introduction of Honor Guests.

Presentation of Dr. George R. Callender, Jr., President, West Virginia State Medical Association.

Introduction of Convention Chairmen—Mrs. Robert R. Pittman and Mrs. R. M. Ferrell.

Roll Call of Delegates—Mrs. Harvey Martin, Recording Secretary.

Convention Rules of Order—Mrs. William T. Lawson, Parliamentarian.

Treasurer's Report—Mrs. Charles E. Andrews.

In Memoriam—Mrs. Hu C. Myers.

Credentials and Registration—Mrs. D. Sheffer Clark.

Keynote Address—Mrs. G. Prentiss Lee, President, Woman's Auxiliary to the American Medical Association.

Recommendations from Pre-Convention Board Meeting—Mrs. Robert J. Tchou.

New Business and Announcements.

Report of the Revisions Committee—Mrs. William A. Thornhill, Jr.

Report of the Nominating Committee, First Reading—Mrs. J. N. Jarrett.

Election of the 1972 Nominating Committee.

Reports from Officers and Standing Committee Chairmen. (These reports will not be read, but are published in the Annual Reports Book).

Presentation of Component Auxiliary Presidents by the Regional Directors:
Eastern Region—Mrs. Herbert Stelling.
Northern Region—Mrs. Lewis W. Groves, Jr.

Western Region—Mrs. J. E. Ricketts.

Southern Region—Mrs. J. L. Mangus.

Recess.

THURSDAY AFTERNOON

2:00—Bridge (Trellis Lobby). Hostess, Marion County Auxiliary.

Visit the Exhibits. Exhibit Center Open Until 3:30 P.M.

FRIDAY MORNING

August 20

8:00—Past President's Breakfast—Mrs. J. N. Jarrett, Immediate Past President, *presiding* (Director's Room).

9:45—Second General Session—Mrs. Robert J. Tchou, President, *presiding* (Fillmore and Van Buren Rooms).

Invocation—Mrs. Wilson P. Smith.

Introduction of Honor Guests.

Roll Call of Delegates—Mrs. Harvey Martin.

Address—Mrs. Ramsay H. Moore, President, Woman's Auxiliary to the Southern Medical Association.

Report of the Reading Committee—Mrs. B. F. Puckett.

Convention Announcements—Mrs. Robert R. Pittman.

Reports of Convention Committees:
Finance—Mrs. J. Dennis Kugel.
Credentials and Registration—Mrs. D. Sheffer Clark.
Press and Publicity—Mrs. John E. McKenzie.

Courtesy Resolutions—Mrs. Robert R. Weiler.

Unfinished Business.

Report of the Nominating Committee—Mrs. J. N. Jarrett.

Election of Officers.

Installation of Officers—Mrs. G. Prentiss Lee, President, Woman's Auxiliary to the American Medical Association.

Presentation of President's Pin and Gavel—Mrs. Robert J. Tchou.

Presentation of Past President's Pin—Mrs. J. N. Jarrett.

Inaugural Address—Mrs. M. Bruce Martin.

Announcements.

Adjournment.

FRIDAY AFTERNOON

Golf—Wood County Auxiliary, Hostess.

Visit the Exhibits. Exhibit Center Open Until 3:30 P.M.

FRIDAY EVENING

10:00—Dance—"Le Papillon"—Eastern Panhandle Auxiliary, Hostess. Mrs. William L. Rodgers, Mrs. D. E. Hendricks and Mrs. Frank J. Gavlas (Chesapeake Hall).

Intermission Program—Under the Direction of Richard W. Corbitt, M. D.

SATURDAY MORNING

August 21

10:00—Post-Convention Conference and Board Meeting—Mrs. M. Bruce Martin, President, *presiding* (Fillmore and Van Buren Rooms).

SATURDAY AFTERNOON

2:30—Second and Final Session of the House of Delegates of the State Medical Association (Chesapeake Hall).

Presidential Address—George R. Callender, Jr., M. D.

Installation of Harry S. Weeks, Jr., M. D., as 1971-1972 President of the West Virginia State Medical Association.

(Auxiliary Members are invited and urged to attend).

SATURDAY EVENING

6:30—Cocktail Party and Reception Honoring the Officers of the West Virginia State Medical Association (Chesapeake Hall Terrace).

SCIENTIFIC EXHIBITS

ALLERGY REHABILITATION FOUNDATION, INC.

"CAMP BRONCO JUNCTION"—This summer camp for asthmatic children opened for its fourth eight-week session on June 20 on its 176-acre site in Putnam County. Sixty-five children in this co-educational program came from 17 states and ranged from five and one-half to 16 years of age. Twenty-six visiting allergists, including seven allergy Resident/Fellows, spent one or two weeks at Bronco Junction. Medical-allergy treatment, physical conditioning and camping activities under constant medical supervision are provided to help prepare the asthmatic children for normal physical and emotional development. All asthmatic campers demonstrated reduction in severity and numbers of attacks of asthma.

Merle S. Scherr, M. D., Medical Director.

AMERICAN CANCER SOCIETY
West Virginia Division, Inc.

"PITFALLS IN CANCER MANAGEMENT"—This exhibit depicts mismanagement of cancer patients in three categories: (1) inaction; (2) wrong advice; and (3) wrong action. The exhibit shows how cancer management pitfalls can be avoided by taking adequate histories, doing complete physical examinations and being constantly on the alert for cancer with all patients, asymptomatic as well as symptomatic.

AMERICAN MEDICAL ASSOCIATION
(Program Services Department)

The AMA's Program Services Department will exhibit materials on a number of topics, including Health Maintenance Organizations as seen by the AMA; Medicredit; AMA membership, and AMA policy.

James S. Imboden, Field Service Officer.

CHARLESTON GENERAL HOSPITAL MEDICAL PHYSICS LABORATORY

This exhibit will offer a pictorial review of the use of isotopes in the general hospital. It will include a display on various physiological function tests, imagining, and a review of several endocrinologically related isoimmunoassays.

Steven A. Artz, M. D., and Maxine Groff.

CONTINUOUS CYCLIC HORMONAL THERAPY

This exhibit reports on results achieved in relieving both the objective and subjective symptoms of the menopause by using an estrogen-progestin combination on a continuous cyclic basis. Patients receive estrogen every day, and in addition they are given progestin from day 20 through 24, thus insuring hormonal-induced withdrawal bleeding on the 28th day.

F. P. Rhoades, M. D., and N. A. Rhoades, Technician.

KIDNEY FOUNDATION OF WEST VIRGINIA, INC.

The Kidney Foundation's exhibit will feature an artificial kidney machine which sustains life for persons in hospitals and in their homes. Organ donor cards and current literature about kidney disease will be available.

Dr. and Mrs. John Corrtill.

THE METABOLIC ABNORMALITIES OF OBESITY

This exhibit shows many of the newer metabolic abnormalities of which the practicing physician must be made aware. The findings set forth are the results of research, and are designed to provide stimulation and interest in a field which has been long neglected. Newer diagnostic methods and laboratory procedures are stressed in simple form.

Irving B. Perlstein, M. D.

THE MYERS CLINIC—BROADDUS HOSPITAL

"POLYCYSTIC KIDNEYS"—This is an in-depth study and presentation of polycystic kidneys, with a presented discussion of the etiology of this disease. The exhibit contains gross specimen photographs; photomicrographs and post-mortem photographs.

F. R. Franyutti, M. D., and J. Richard Crawford.

NATIONWIDE INSURANCE COMPANY

"PART B CARRIER'S ROLE IN MEDICARE" is described briefly in this display. The booth will be in charge of experienced Nationwide Medicare personnel who will be available to answer general and specific Medicare inquiries during convention exhibit hours.

R. E. Lenhart, West Virginia Medicare Manager.

THE NATIONAL FOUNDATION MARCH OF DIMES

This exhibit will illustrate the National Foundation's activities toward helping to combat and treat birth defects.

G. William Trout, State Representative.

PLASTIC AND RECONSTRUCTIVE SURGERY

This exhibit will offer photographs demonstrating the scope of plastic and reconstructive surgery, and some of the conditions that can be aided. The photographs will be of actual cases, depicting conditions requiring surgery and results of operations. The photographs will demonstrate, in some cases, the actual steps in surgical procedures, and the cases will be grouped according to whether they involve treatment of congenital deformities, hand reconstruction, malignancy, etc.

Gene L. Hackleman, M. D.

SEX EDUCATION AND THE PHYSICIAN

The family physician's and his wife's role in sex education of children from the standpoint of their being parents and citizens is presented. The doctor also has a responsibility in his role of a professional person to assist with sex education when he can. Details of how (or if) to set up a program in the school to best help children and avoid community conflict are described.

John C. Willke, M. D., and Mrs. John (Barbara) Willke, B. S., R. N.

SOCIAL SECURITY ADMINISTRATION

"SOCIAL SECURITY DISABILITY BENEFITS PROVISIONS"—This display acquaints the physician with Social Security payments to which working people under age 65 might be entitled if they become too severely disabled to work. It also sets forth referral procedures for patients who need more detailed information about disability payments, or help in applying for them.

William S. Herold, M. D., Mrs. Christine Elliott and James H. Swaim.

WEST VIRGINIA DEPARTMENT OF HEALTH

(Vaccination Program)

"VACCINATION PROGRAM ACTIVITIES IN WEST VIRGINIA"—Featured in this table-top display is a series of colored transparencies depicting immunization activities in West Virginia. Methods of making the public aware of the threat of German measles, such as marquees, education literature and a street banner, are shown. Actual clinic scenes—displayed along with an outline map of the State showing the progress of mass Vaccination Program immunization campaigns against Rubella—are supplemented with a graphic comparison of West Virginia with the nation for both the Rubella and measles caseload.

Donald Adkins, Public Health Field Worker.

(Family Planning Project)

"FAMILY PLANNING IN WEST VIRGINIA"—This is a lighted, graphic display of clinics and their locations; information, and literature on West Virginia's Family Planning Program.

Mrs. Marilyn Weeks, Social Worker.

WEST VIRGINIA DEPARTMENT OF MENTAL HEALTH

"SERVICES FOR DISTURBED CHILDREN"—This exhibit features an audio-visual representation of eight services available to disturbed children in West Virginia. The services are information and referral; treatment; rehabilitation; residential care; transition and relief, and special education.

WEST VIRGINIA HEART ASSOCIATION

"DIAGNOSTIC TESTING UNIT ON HYPERTENSIVE DISEASE"— Designed as a table-top testing unit, this display permits physicians to test their diagnostic ability. After reading four case histories, and studying data on the panels, the physicians answer multiple-choice questions about each case and then check their answers.

Richard J. Bates, Executive Director, and Mrs. Viola Hutchison, Field Representative.

WEST VIRGINIA UNIVERSITY MEDICAL CENTER

"CONGENITAL DERMOID CYSTS OF THE NOSE"—This exhibit illustrates that a dermoid cyst of the nose, which apepars clinically small, might have extensions into the nasal septum and cribriform plate. Preparations for a wide surgical excision and plastic repair then must be made. The exhibit offers a continuous film strip of one operation, with narration to five individual earphones. Also, photographic and transparency materials are used to illustrate typical cases, differential diagnosis and salient features.

Ronald L. Wilkinson, M. D.

WEST VIRGINIA REGIONAL MEDICAL PROGRAM

This exhibit will illustrate key features of the Voluntary Office Self-Audit Service sponsored by the Regional Medical Program and the West Virginia State Medical Association; and the "dial access" technique which makes available to physicians and other health care personnel, by telephone, lecture and other informational materials from a library at West Virginia University.

WVU SCHOOL OF MEDICINE & THE WEST VIRGINIA JOINT COUNCIL ON TEACHING HOSPITALS

"CURRICULAR ADAPTATION; WEST VIRGINIA'S FLEXIBLE FOURTH YEAR"—The West Virginia University School of Medicine's fourth-year Selective Experience Program has been in operation for over a year. The exhibit (1) states the goals of the program; (2) identifies community hospitals that participate; (3)shows how many hospitals offer selectives and how many students can be accommodated extramurally in each type of program; (4) demonstrates the current fourth-year class' division of time among WVU, community hospitals in West Virginia and out-of-state university hospitals. Photographs picture students at work in various participating hospitals. Reprints describing the program will be available.

Frank W. McKee, M. D., and David Z. Morgan, M. D., Dean and Assistant Dean, respectively, WVU School of Medicine; and Charles E. Andrews, M. D., Provost for Health Sciences, WVU Medical Center.

WEST VIRGINIA DIVISION OF VOCATIONAL REHABILITATION

"A PLACE OF HOPE FOR THE HANDICAPPED"—This exhibit consists of a series of photographs of individuals in various phases of the rehabilitation process at the West Virginia Rehabilitation Center at Institute. The Center is a comprehensive rehabilitation facility offering a wide range of treatment, evaluation and training services to the State's mentally and physically handicapped—and is the only facility of its kind in West Virginia offering this multi-discipline approach to rehabilitation.

Mrs. Ellen K. Bertone, Assistant Chief, Information.

WEST VIRGINIA TUBERCULOSIS AND RESPIRATORY DISEASE ASSOCIATION, INC.

"RESPIRATORY DISEASES"—This is a medical exhibit showing defined types of respiratory impairments, and methods of treatment.

John G. Rogers, Executive Director, and Melvin H. Lively, Program Consultant.

INDUSTRIAL EXHIBITS

AMERICANA CORPORATION

Booth 2

See the new great books of art and the new Americana Encyclopedia.

Representative: Joseph Irwin.

WILLIAM P. POYTHRESS & COMPANY, INC.
Richmond, Virginia

Booth 3

You are cordially invited to visit the exhibit of Wm. P. Poythress & Co., Inc., manufacturers of ethical pharmaceuticals since 1856, and discuss our line of established products. Our medical representatives at Booth No. 3 will be available to supply you with literature, samples and technical information on Antrocol, Bensulfoid Lotion, Merpectogel, the Mudrane combinations, Panalgesic, Solfo-Serpine, Solfoton, Synirin, TCS, Trocinate and Uro-Phosphate.

Representative: Mr. Hugh P. Mackey.

MEDFACT FILMS
Massillon, Ohio

Booth 7

PITNEY-BOWES, INC.
Charleston, West Virginia

Booth 8

A. H. ROBINS COMPANY
Richmond, Virginia

Booth 9

The A. H. Robins Company will present the Dalkon Shield, the new, modern, superior intra-uterine device, at this meeting. You are cordially invited to visit our display in Booth No. 9 and discuss the Dalkon Shield with our representatives.

Representatives: Gus Addington and Charles Allanson.

AUTOMATED MANAGEMENT SYSTEMS
Paden City, West Virginia

Booth 10

ROSS LABORATORIES
Columbus, Ohio

Booth 11

You are cordially invited to request from our representative at Booth No. 11 any of the many available Ross Service materials, including timesaving instructional aids for your patients.

Representatives: Steve McClure, Territory Manager in Charge; John Winnenberg, and Joe Park.

SANDOZ PHARMACEUTICALS
Hanover, New Jersey

Booth 12

Sandoz Pharmaceuticals cordially invites you to visit our display at Booth No. 12, where we are featuring Mellaril, Hydergine, Serentil, Cafergot P-B, Fiorinal and Bellergal.

MERCK SHARP & DOHME
West Point, Pennsylvania

Booth 13

The Merck Sharp & Dohme exhibit in Booth No. 13 has been designed to offer a contribution to your therapeutic armamentarium. Technically trained personnel are available to discuss the scope and variety of services offered to physicians.

Representatives: Harold L. Ashworth and Marlen J. Klopp.

WILLIAM H. RORER, INC.
Ft. Washington, Pennsylvania

Booth 16

William H. Rorer, Inc., takes pride in exhibiting its fine pharmaceutical products. Our representatives will gladly discuss Maalox, Camalox, Ascriptin, Quaalud and our other products.

ALERT MEDICAL-SURGICAL CORP.
Charleston, West Virginia

Booth 17

MAGNESS PETROLEUM COMPANY
Oklahoma City, Oklahoma

Booth 18

LAKESIDE LABORATORIES, INC.
Milwaukee, Wisconsin

Booth 19

ORTHO COMFORT STORES
Phoenix, Arizona

Booth 20

MEAD JOHNSON LABORATORIES
Evansville, Indiana

Booth 21

PROFESSIONAL MANAGEMENT, INC.
Lancaster, Ohio

Booth 22

SCHOLASTIC SYSTEMS, INC.
Hackensack, New Jersey

Booth 23

J. B. ROERIG DIVISION
CHAS. PFIZER & CO., INC.
New York City

Booth 24

You are cordially invited to visit the J. B. Roerig exhibit, Booth No. 24. Our Professional Service Representatives in attendance will welcome your questions about our pharmaceutical products. You may be interested in discussing Geopen (carbenicillin) and Marax (hydroxyzine HC1, ephedrine sulfate, theophylline).

AYERST LABORATORIES
New York City

Booth 25

Our representatives look forward to a visit with you at our Booth No. 25, and for the opportunity to discuss the Ayerst products and services of interest to you.

STUART PHARMACEUTICALS
Division of Atlas Chemical Industries, Inc.
Pasadena, California

Booth 26

A cordial invitation is extended to all members and guests to visit the Stuart Pharmaceuticals Booth, No. 26. Trained representatives will be in attendance to answer your questions on our products: Mylanta,® Chewable Sorbitrate,® Sorbitrate® sublingual and oral, Kinesed,® Stuartnatal™ 1+1, and others.

E. R. SQUIBB & SONS, INC.
New York City

Booth 27

E. R. Squibb & Sons, Inc., has long been a leader in development of new therapeutic agents for prevention and treatment of disease. The results of our diligent research are available to the Medical Profession in new products or improvements in products already marketed. At our booth, No. 27, we will be pleased to present up-to-date information on these products.

WYETH LABORATORIES
Philadelphia, Pennsylvania

Booth 28

Wyeth will feature: Ovral® (each tablet contains 0.5 mg. norgestrel with 0.05 mg. ethinyl estradiol) Wyeth, Tablets; Ovral®-28 (21 white Ovral® tablets each containing 0.5 mg. of norgestrel and 0.05 mg. of ethinyl estradiol and 7 pink inert tablets); and Serax® (oxazepam) Wyeth, Capsules 10, 15, 30 mg. —Tablets 15 mg. Full information is available at Booth No. 28.

SMITH, MILLER & PATCH, INC.
New Brunswick, New Jersey

Booth 29

Smith, Miller & Patch, Inc., New Brunswick, New Jersey, will feature at its Booth No. 29 a new nonbarbiturate hypnotic, Somnafac & Somnafac Fourte; Deconamine, a potent oral antihistamine and decongestant in three dosage forms; Pyocidin Otic Solution; Vasocidin Ophthalmic-Otic Solution; our hematinics, Vitron-C and Vitron-C Plus; and our specialty bowel regulator, Kondremul.

Representatives: William E. Mitchell, Division Manager; Charles W. Perz, and Donald W. Lanham.

PHILIPS ROXANE LABORATORIES, INC.
Colubus, Ohio

Booth 30

The Philips Roxane Laboratories, Inc., booth No. 30, will feature Duphaston (dydrogesterone) for the management of severe primary dysmenorrhea, Potassium Chloride Liquid for potassium supplementation, the Acutuss line of upper respiratory products and other selected specialties.

Representative: John Settle.

STATE MEDICAL ASSOCIATION'S GROUP INSURANCE PROGRAM
Charleston, West Virginia

Booth 31

THE MEDICAL ARTS SUPPLY COMPANY
Huntington, West Virginia

Booth 41

We cordially invite the members and guests of the West Virginia State Medical Association to visit us, and to see the "all new" Burdick Solid State EK/5 Electrocardiograph. This is truly a remarkable advance in electrocardiography. Also see the Clay-Adams "Accu-Stat," the "instant laboratory."

Representative: Roy Childers.

THE COCA-COLA COMPANY
Atlanta, Georgia

Booth 42

Ice cold Coca-Cola served through the courtesy and cooperation of the Coca-Cola Bottling Company of Clifton Forge, Inc., and Coca-Cola USA.

Representative: Leo McDevitt.

ELI LILLY AND COMPANY
Indianapolis, Indiana

Booth 43

You are cordially invited to visit the Lilly exhibit. Our sales representatives welcome your questions about our pharmaceutical products. You may be particularly interested in discussing Keflex® cephalexin monohydrate.

Representatives: J. J. Risch and Stanley L. Simpson, III.

W. B. SAUNDERS COMPANY
Philadelphia, Pennsylvania

Booth 44

HOSPITAL AND PHYSICIANS SUPPLY COMPANY
Charleston, West Virginia

Booth 45

We shall be displaying at Booth No. 45 Surgi-Fix, Dressing Cover and Ritter "75" Tables, plus other items.

Representative: Edward K. Kloman.

ANNUAL REPORTS

Cancer Committee

The Cancer Committee met with Drs. N. H. Dyer and Luke W. Frame and discussed the problems associated with patient care under the Cancer Control Division of the State Department of Health.

The Committee will continue to work with Doctor Dyer and his Division on these problems. A grant for Cancer Education and Service has been submitted from the Committee to the Regional Medical Program. The Committee co-sponsored the Tumor Registry Workshop in Charleston on August 7, 1970. The Committee also co-sponsored a second meeting for organization of the Tumor Registrars Society of West Virginia in June, 1971.

Respectfully Submitted,

Alvin L. Watne, M. D.
Chairman

June 10, 1971.

Insurance Committee

Two substantial advances in our Association Group Insurance Program were achieved during the past year . . . both materially adding to the coverage and service of our Program.

The first is the addition of a much needed HOSPITAL MONEY Plan to our portfolio of coverages. Second is complete computerization of all policyholder records and accounting procedures . . . in the administration of our Program.

Hospital Money Plan

The new HOSPITAL MONEY Plan responds to the mounting out of pocket costs both at the hospital and at home . . . when a member or one of his household goes to the hospital at today's inflated prices. Specifically, the new Plan provides an unencumbered daily flow of "extra cash" . . . up to $50 a day for a member or his wife and half benefits for his dependent children. The Plan is directly aimed at the "over and above" expenses that inevitably attend today's hospital confinement.

Because of this wide variation in needs and unpredictability of such expenses . . . there is no restriction on how or for what the money is spent. Benefits are paid directly to the insured and are tax deductible. The Plan is designed to both complement and supplement the Government's proposed Health Care Program.

In short, spiraling inflation has created a pressing need. This need is best answered by an unencumbered daily flow of extra cash. This is the objective and design of HOSPITAL MONEY.

Computer Program

Computerization adds an important new dimension to the performance of our Group Insurance. Since inception, your Association has carefully and judiciously selected the plans that now compose our Portfolio of Insurance.

Eight separate plans offer a wide range of essential forms of personal coverages. Each plan is designed to meet a specific need and each offers sufficient interior flexibility for adjustment to the individual member's use. With the advice and counsel of our Resident Administrator, a member can selectively compose a Program tailored to fit his individual requirements.

Computerization now adds a valuable and timely contribution to the function of our Program. Coverage requirements of individual members change from year to year. His program should be updated and adjusted to meet these changing needs. With the new "push button" capability of the computer, a member can be kept advised not only of amount and kind of coverage he now has but also the revisions needed to keep his program abreast of current requirements.

Summary

Our State Association Group Insurance Program includes the two fundamental components for satisfactory performance . . . COVERAGE and SERVICE.

For Coverage—our diversified portfolio of plans provides vitally needed forms of personal protection.

For Service—our Resident Administrator offers individual counseling and all other policyholder services including the payment of claims . . . here in the state.

Our Group Insurance is in its 25th year of operation. The continued high level of member participation and the sound performance of our Program is in a substantial measure due to the progressive effort and dedication of our Resident Administrator, J. Banks Shepherd.

Respectfully submitted,

C. A. Hoffman, M. D.
Chairman
Robert L. Chamberlain, M. D.
R. U. Drinkard, M. D.
A. C. Esposito, M. D.
F. Perry Greene, M. D.
Upshur Higginbotham, M. D.
Kenneth G. MacDonald, M. D.
Buford W. McNeer, M. D.
J. C. Pickett, M. D.

June 1, 1971.

Medical Education and Hospitals

The past year has seen major involvement, by your Committee on Medical Education and Hospitals, in a number of significant developments in the field of medical education in West Virginia.

Of particular importance was the actual launching of the Selective Experience Program for fourth-year medical students at West Virginia University. This was the first project offered, and accepted by, the West Virginia Joint Council on Teaching Hospitals in its initial relationship with WVU. Your Committee was among organizations instrumental in the formation of the Joint Council. A detailed review of the Selective Experience Program's initial year was prepared for the June issue of *The West Virginia Medical Journal* by Roland E. Schmidt, M. D., Acting Assistant Dean for Curriculum, at WVU's School of Medicine.

Also under way as this Committee year ended was the Voluntary Office Self-Audit Service, a special project launched by the West Virginia State Medical Association and the West Virginia Regional Medical Program as a new educational exercise toward helping physicians improve the patient care they provide in their offices. Because of a cutback in anticipated Federal funds, and other apparent administrative problems, operational control of the project has remained with RMP, but the Medical Association participation and Committee support has generally developed along the lines originally envisioned. Serving as field operations director for the Service is Daniel Hamaty, M. D., of Charleston, Vice Chairman of the Committee on Medical Education and Hospitals. Several other Committee members are participating as peers, and in other roles in the project.

In January, 1971, the Committee and the State Medical Association again joined in sponsorship of the annual Mid-Winter Conference on Chest Diseases in Charleston. The program took the form of a Symposium on Air Pollution, and was broadened to include a public session on "Our Health and Air Pollution" at Morris Harvey College on Saturday, January 30, using many of the same speakers who addressed the scientific sessions on Sunday, January 31, at Charleston's Daniel Boone Hotel. Detailed proceedings of the Saturday session were published and made available to industrial and other representatives, and private citizens, who requested copies.

The Committee also sponsored, on April 24-25 in Charleston, a Second Statewide Medical Education Planning Conference, and as the year ended it was in the process of reviewing detailed proceedings of that three-session meeting. Specific new Committee recommendations based at least in part on Conference discussions came at a June 13 meeting. They included resolutions calling upon the Medical Association and its Council to take all proper steps to support establishment at WVU of a Department of Family Practice; and a Department of Post Graduate and Continuing Education.

Individual members of your Committee have remained active on the Joint Council on Teaching Hospitals, and in other educational programs. State Medical Association Representatives on the Council this year have been David Z. Morgan, M. D., of Morgantown, who also has served as Chairman; P. A. Tuckwiller, M. D., of Charleston, and Forest A. Cornwell, M. D., of Beckley. Several other committee members have served on the Council as Medical Staff representatives of member Hospitals. Mr. Charles R. Lewis, the Committee's Secretary, serves as Secretary-Treasurer of the Joint Council, and also is the Medical Association's liaison consultant to the Voluntary Office Self-Audit Service.

Your Committee feels it has completed another productive year, and is most appreciative of the support it has received from the officers, the Council and other members of the Medical Association. It also is aware of the tremendous challenges which lie ahead, in particularly such an area as that involving the future of residency programs.

Respectively submitted,

Pat A. Tuckwiller, M. D.
Chairman

Charleston, W. Va.
June 15, 1971

Syphilis Committee

The Syphilis Committee held a luncheon meeting on October 14, 1970, at the Rose City Cafeteria in Charleston. A quorum was present in the persons of N. H. Dyer, M. D., Chairman, David S. Pugh, M. D., Lyle D. Vincent, M. D., Thomas L. Thomas, M. D., M. A. Viggiano, M. D., and Isaiah Wiles, M. D. Representatives from the State Health Department, Bureau of Venereal Disease Control, Messrs. John R. Shomo and Ronald G. Bryant, were also in attendance.

In 1970 persons under age 25 accounted for 76 per cent of the infectious syphilis and gonorrhea cases reported in the State. The primary concern of Committee members was the rising incidence of venereal disease among our youth and action which could be initiated by the Committee to curb the present trend. The Committee unanimously agreed that legislation was needed to permit physicians to examine, diagnose and treat minors infected with or suspected of having a venereal disease without consent of parent or guardian. It was agreed that parental involvement should be left to the discretion of the physician, taking into consideration the patient's total well being. Committee members asked that the proposed legislation be drafted by the State Health Department and submitted to Committee members for their review and comments. Subject to the approval of the Committee, the final

draft was to be sent to the West Virginia State Medical Association.

Dr. Thomas L. Thomas made a motion that the Committee record its concern about the recent cutback in funding for the State's venereal disease control program, and that the State Medical Association be encouraged to take appropriate action to insure the continued operation of venereal disease control activities. It was also suggested that the West Virginia Public Health Association be asked to consider these issues and to initiate appropriate actions.

As recommended by the Syphilis Committee, a proposed change in West Virginia Public Health Law, Chapter 16, Article 4, Section 1304 was submitted on November 12, 1970, to the State Medical Association for their consideration and support. A letter and a copy of the proposed legislation was sent to the West Virginia Public Health Association. The legislation, labeled House Bill No. 622, "Examination and treatment of minors for venereal diseases by physicians without knowledge and consent of parent or guardian," was adopted by the State Legislature and signed into law by Governor Arch A. Moore on February, 19, 1971. This Bill should encourage young victims of the venereal diseases to seek treatment immediately, thereby reducing the possibility of their developing complications and/or exposing others needlessly.

At the writing of this report, state funding for the venereal disease control program has not been increased and the allocation of federal funds is still uncertain.

Respectfully submitted,

N. H. Dyer, M. D.
Chairman

May 28, 1971

To Physicians in Training

To all physicians in training and especially West Virginia residents. West Virginia is in need of physicians in all categories for rural and urban practice. Any physician desiring information concerning openings in the State can communicate with *The Journal. The Journal* will publish free for 6 issues pertinent information concerning any qualified physician who is seeking a location in West Virginia. Single copies of *The Journal* listing practice opportunities will be mailed to physicians upon request.

A roster containing a list of officers of county societies and specialty sections of the West Virginia State Medical Association is available upon request to the headquarters offices. Also, information pertaining to West Virginia licensing laws will be mailed to interested physicians. Interested parties may then write the officers of component societies or sections for further information.

Any other information about West Virginia will be secured from outside sources, if possible, and sent upon request. All letters to *The Journal* will receive individual immediate attention.

The West Virginia Medical Journal

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Recognition and Management of Common Sprains in Athletes

K. Douglas Bowers, Jr., M. D.

Sprains are the most undertreated of all athletic injuries. Failure to recognize the severity of the initial episode apparently is the cause. The result frequently is a chronically unstable joint susceptible to recurrent sprain and premature degenerative joint disease. The major joints most commonly affected are the ankle, knee and acromioclavicular, in that order.

There were 25 freshmen football recruits at West Virginia University in 1967. Ten were found to have some degree of disability due to previous sprains. Of these ten, seven were felt to have been undertreated at the time of initial injury. All seven had significant recurrent episodes during their college careers.

There is little doubt, therefore, that accurate diagnosis and adequate treatment of the first sprain, frequently occurring in high school, will reduce the number of injuries in college athletes.

The purpose of this paper is to discuss the recognition and management of some of the common sprains. It is hoped that such discussion will serve as a review for the knowledgeable and as a guide for those who need it.

The term, "sprain," implies ligamentous damage in which fibers are stretched beyond their physiologic limit. The outcome is a mild, moderate, or severe sprain. To accurately categorize each should not be too difficult. Once done, there should be little question concerning proper treatment.

Mild Sprain

In mild sprains many fibers are overstretched, a very few perhaps to the point of disruption. The ligament is essentially intact and can withstand additional stress. The joint is stable. Symptoms are minimal and disability slight. Treatment is directed towards relief of pain. Immobilization is rarely indicated and return to full activity is rapid.

The Author

- **K. Douglas Bowers, Jr., M. D., Clinical Assistant Professor, Orthopedic Surgery, West Virginia University Medical Center, Morgantown.**

Moderate Sprain

With moderate sprains many, but not all, fibers are torn. A portion of the ligament remains in continuity but is inadequate to withstand much stress. Pain, swelling, point tenderness, limited motion and disability are more pronounced and of longer duration. There is some degree of joint instability and thus some form of immobilization is indicated. The torn fibers must be protected until healing time has elapsed. Return to unlimited activity is delayed by three to six weeks.

Severe Sprain

A severe sprain is characterized by complete ligamentous disruption or total avulsion at one of its bony attachments. Signs and symptoms are still more intense and disability marked. The joint is unstable. Treatment usually requires surgical repair for optimal results. The repair must be carried out within 10 days following injury. Otherwise, ligament reconstruction may be necessary.

Ankle.—Most ankle sprains seen in college athletes are recurrent. Artificial playing surfaces apparently have reduced the overall number by providing even footing throughout.

The lateral ankle ligaments are three in number. They are the anterior and posterior talofibular and the calcaneofibular. The posterior talofibular arises from the back of the lateral malleolus and runs posteriorly and slightly downward to attach to the posterior process of the

talus. This structure prevents anterior displacement of the talus. The anterior talofibular extends from the anterior margin of the lateral malleolus forward and medially attaching to the neck of the talus. It prevents talar rotation when the foot is neutral and inversion and rotation when plantar flexed. Inversion is also checked by the calcaneofibular ligament running from the tip of the lateral malleolus downward and slightly backward to the os calcis.

The anterior and posterior inferior tibiofibular ligaments bind the distal tibia and fibula together. This affords stability to the lateral side of the ankle mortise.

Medial stability is afforded by the fan-shaped deltoid ligament of which there are four segments. The medial malleolus serves as the proximal attachment of each. From this point fibers extend anteriorly to the talus and navicular bones, inferiorly to the sustentaculum tali, and posteriorly again to the talus. This combined structure prevents excessive rotation and eversion.

By far the most frequent type of ankle sprain is the inversion type stressing the lateral ligaments. If the foot is in neutral position most of the force is exerted on the calcaneofibular ligament. With the foot plantar flexed, the anterior talofibular receives the brunt of the force. In most instances both are affected, the extent of each determined by the degree of plantar flexion.

Eversion stress challenges the deltoid ligament. As with inversion sprains, one segment may be more severely involved according to the degree of plantar flexion of the foot at the moment of injury.

Rotational sprains are very common and generally mild. This variety occurs when the foot is in neutral position or partially dorsiflexed. The mechanism involved is an external rotation of the talus within the mortise. The lateral margin of the dome strikes the lateral malleolus, forcing it laterally and posteriorly. This results in sprain of the anterior deltoid fibers and the anterior inferior tibiofibular ligament.

An accurate appraisal of the situation should not be difficult. The injured player can almost invariably relate the mechanism of injury. The importance lies in determining the severity of the sprain, for this dictates the treatment.

In mild sprains pain usually is little more than bothersome. Point tenderness over the involved structure is minimal and swelling slight. Ambulation is not difficult. Passively repeating the mechanism of injury intensifies the pain but not markedly so. Radiograms usually are unnecessary.

Immediate application of ice followed by compression dressing and slight restriction of activity for several days usually suffices in treating mild injuries. If circumstances allow, the ligament can be injected with an agent such as Decadron-Xylocaine, supportive adhesive strapping applied, and competition immediately resumed. Sterile precautions must not be abandoned in order to save time.

Moderate sprains are perhaps the most troublesome with which to deal. Pain, swelling and point tenderness are more marked. Stressing the injured tissue significantly increases discomfort but no gross instability is demonstrable. Ambulation may result in such pain that crutches are necessary. Stress films often are indicated to rule out severe sprain.

Moderate sprains require more vigorous treatment. The torn fibers must be adequately pro-

Figure 1. Inversion stress film showing lateral ankle instability indicating complete ligamentous disruption.

tected until healing time has elapsed. Adhesive strapping over which a compression dressing is applied should follow the immediate use of ice and elevation. Weight bearing initially may have to be limited by using crutches or a cane. As symptoms subside, activity may be increased, progressing to full within three to four weeks.

With severe sprains all of the signs and symptoms are still more marked. Swelling is rapid and often extreme. Weight bearing may be impossible. Passively stressing the injured ligaments will frequently reveal obvious instability. These severe injuries should be evaluated radiographically to rule out fractures as well as to confirm the clinical impression with stress films (Figure 1).

Severe injuries should be treated by cast immobilization or surgical repair. If casting is decided upon, a boot walker should be worn for six weeks.

Injection of a local anesthetic may be necessary in order to obtain an accurate stress film. This should be done without hesitancy and always under sterile conditions.

Recurrent mild and moderate injuries should be treated as if they were initial episodes. Symptomatic instability secondary to an old severe sprain should be corrected by ligament reconstruction.

Knee.—Trauma to this joint can be difficult to evaluate accurately even in the best of circumstances. The result of optimal care is not infrequently disappointing. It goes without saying, therefore, that neglected and undertreated lesions unquestionably lead to a poor outcome.

An accurate analysis is best made just minutes after the injury before pain, muscle spasm and joint swelling can render diagnosis difficult. When these reactions to serious trauma exist, the examination may well be misleading. Under such conditions the joint should be examined under adequate anesthesia to determine the exact extent of damage. Otherwise the opportunity for primary ligament repair may be lost and a reconstruction procedure required at a later date.

The medial collateral ligament has as its proximal attachment a large area of medial epicondyle of the femur. As it runs distally it becomes broadest at the level of the medial meniscus, to which it has a firm attachment. Inferiorly it inserts into the medial tibial condyle as far distally as the level of the tibial tuberosity. This structure prevents excessive valgus and rotational displacement.

Reaching from the lateral femoral epicondyle to the fibular head is the strong cord-like lateral collateral ligament. In addition to this structure, lateral stability is provided by the biceps femoris and popliteus tendons and the iliotibial tract.

The cruciate ligaments cross within the center of the joint and are named according to their tibial attachments. The anterior ligament runs from the anterior intercondylar area of the proximal tibia upward, backward and lateralward to attach to the posteromedial region of the lateral femoral condyle, preventing anterior displacement of the tibia on the femur. The posterior ligament arises from the posterior intercondylar fossa of the tibia. It extends upward, medially and forward to insert into the lateral surface of the medial femoral condyle, preventing posterior displacement of the tibia on the femur.

Most Common Knee Injury Mechanism

The most common mechanism of injury to the knee is a valgus stress applied with the joint partially flexed, the foot firmly planted, and the femur internally rotated on the tibia. The result is a sprain of the medial collateral ligament and if the force continues, the anterior cruciate as well.

Mild sprains are recognized by the minor signs and symptoms. Pain is not severe, nor is point tenderness over the site of the damage. Applied valgus stress increases pain somewhat but reveals no instability. The anterior drawer sign is negative. Joint distention is not seen until 12 to 24 hours after injury, if at all. Weight bearing is possible without significant discomfort and joint motion is normal.

These mild sprains require only restriction of activity for several days. During this period hydrotherapy and progressive resistance quadriceps exercises are indicated.

A hemarthrosis-synovitis developing to a variable degree within several hours after trauma is the rule following moderate sprain. Signs and symptoms are exaggerated beyond those accompanying mild sprain. Motion is somewhat limited and the extremes of motion painful. Valgus stress intensifies pain and often reveals slight medial laxity. The anterior drawer sign is negative. Weight bearing may be painful enough to require assistance.

A walking cylinder cast to be worn for three to four weeks is advised. During the period of immobilization, quadriceps setting exercises should be done faithfully. Hydrotherapy and progressive resistance quadriceps exercises are

Figure 2. Valgus stress film of knee revealing medial laxity indicating medial collateral ligament rupture.

instituted immediately upon cast removal. Activity is progressively increased and unrestricted activity allowed when motion is normal and painless, there is no effusion, the joint is completely asymptomatic, and the quadriceps rates excellent.

When the medial collateral is totally disrupted the anterior cruciate also is often torn. Pain and disability are immediate and severe. Hemarthrosis produces rapid joint distention. Weight bearing usually is impossible and motion markedly restricted. Point tenderness is extreme at the site of tear.

Valgus stress reveals significant medial laxity but may not intensify pain as much as in moderate sprains. If both ligaments are torn, the anterior drawer sign is positive and rotary instability obvious. A stress film will unequivocally confirm complete medial laxity (Figure 2).

Such extensive trauma requires surgical repair for optimal outcome. This should be carried out within 10 days following injury. With proper postoperative rehabilitation, vigorous activity may be possible no earlier than 16 weeks after surgery.

Excessive varus force stresses the lateral collateral ligament and if continued also the anterior cruciate. Such a mechanism may damage all of the lateral supporting structures and the peroneal nerve. Distal motor and sensory function should always be evaluated.

The format of diagnosis and treatment is the same as for valgus stress. Varus stress films reveal lateral instability with severe sprains (Figure 3).

Hyperextension injuries of the knee are common. They usually result in mild to moderate degrees of posterior capsule strain. The mild injuries result in pain posteriorly and often slight traumatic synovitis with mild effusion. Passively hyperextending the joint exaggerates pain but reveals no instability. Treatment need be only hydrotherapy, quadriceps exercises and limited activity for several days.

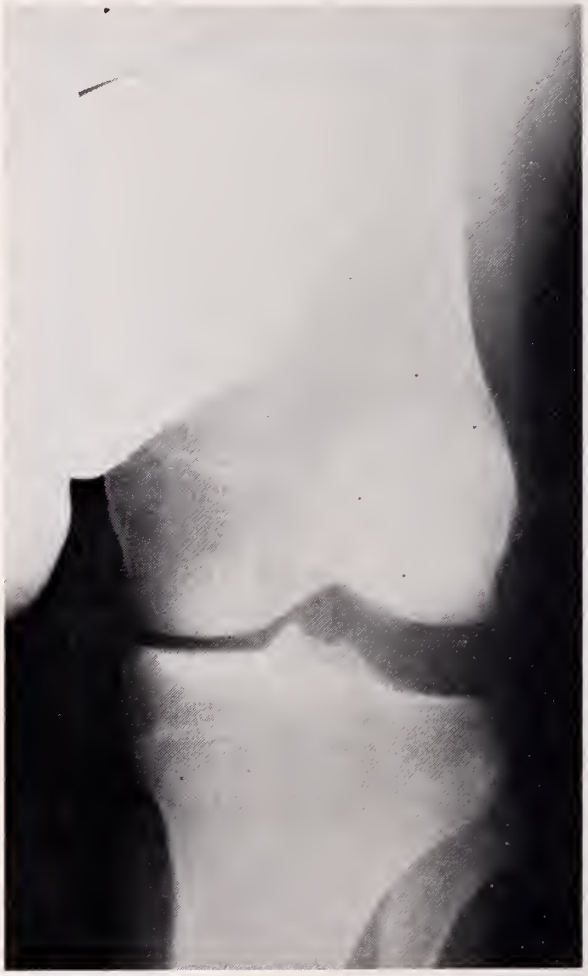

Figure 3. Varus stress film of knee revealing complete lateral instability indicating at least complete fibular collateral ligament disruption.

Moderate hyperextension trauma results in a more severe strain of the posterior capsule, often with partial tear of the structure. Signs and symptoms are more pronounced and cylinder cast immobilization for several weeks may be necessary.

Severe hyperextension results in complete posterior capsule tear and often anterior cruciate rupture. Rapid hemarthrosis develops and the joint can be placed into excessive recurvatum. If the anterior cruciate is torn the anterior drawer sign is positive, though often difficult to demonstrate. Surgical repair is indicated.

The anterior cruciate also may be torn without significant damage to the other three major ligaments by excessive rotational stress. With the knee partially flexed, as the femur is internally rotated on the tibia, this ligament may be stretched over the medial surface of the lateral femoral condyle to the point of rupture. Anterior instability may be demonstrable only under anesthesia and primary repair is indicated.

Acromioclavicular Joint.—The term, "shoulder separation," is used in reference to the acromioclavicular joint. Its use should be discontinued in favor of the more acceptable orthopedic terminology of mild, moderate, or severe sprain.

The acromioclavicular articulation is an arthrodial joint, stabilized primarily by the coracoclavicular ligaments. The joint capsule and surrounding acromioclavicular ligaments are relatively weak and easily ruptured. A fibrocartilaginous meniscus is sometimes interposed between the facets. A fall on the point of the shoulder, driving the scapula downward and forward, is the common mechanism of injury.

Mild sprains result in immediate pain often out of proportion to the extent of trauma. Point tenderness over the joint is always present. Swelling is absent to minimal. Manipulation of the clavicle may increase pain but reveals no joint instability. Palpation over the coracoclavicular ligament is painless. Discomfort in the joint is increased by abduction-elevation of the arm and by adduction across the chest. Radiograms are not remarkable.

Pathologically, the capsule and acromioclavicular ligaments have been overstretched with tearing of few fibers. The coracoclavicular ligaments are unharmed and the joint retains adequate stability.

Treatment is essentially symptomatic. Immediate application of ice relieves pain and merely restricting activity for several days may suffice. If significant pain exists, a sling and swath or cloth Velpeau may be necessary for three to five days following which activity as tolerated may be resumed.

Figure 4. AP view of shoulder showing dislocation of AC joint and increase distance between clavicle and coracoid process indicating complete coracoclavicular ligament tear. Loading (stress) film not necessary.

Moderate sprains produce immediate pain and a variable degree of early swelling. Exquisite point tenderness over the joint is common. Active and passive motion as mentioned with mild sprains intensifies pain. There is no discomfort upon direct pressure over the coracoclavicular ligaments. Slight joint instability may be demonstrable but gross motion is absent.

Radiograms may either be normal or show minor subluxation. A normal film may become abnormal if repeated with a load applied to the suspended extremity. This is easily done by having the patient hold a plaster bucket about half full of water.

The pathological lesion is a near complete or complete tear of the capsule and acromioclavicular ligaments. Joint stability is maintained by the intact coracoclavicular ligaments.

Treatment should consist of cloth or plaster Velpeau immobilization for two to three weeks, followed by limited activity for a week, progressing to full activity during the following week.

A severe sprain implies complete joint instability. The tie between the clavicle and shoulder is lost and the weight of the extremity pulls it downward and forward. The distal end of the clavicle becomes displaced upward and backward.

Pain is immediate and usually severe. Swelling is rapid and joint deformity obvious. Point tenderness is present over the coracoclavicular ligaments as well as over the dislocated joint. Clavicular manipulation readily demonstrates gross joint instability. Active motion is markedly restricted.

X-ray study confirms the dislocation, usually without the need for stress films. In addition to complete joint disruption the space between the coracoid and the clavicle is increased (Figure 4).

Pathologically, the coracoclavicular ligaments as well as the capsule and acromioclavicular ligaments are completely torn. The origin of the deltoid is frequently avulsed from the acromion and distal clavicle and a rent often is found in the trapezius.

Treatment should be surgical repair within several days. The Phemister procedure in which the joint is openly reduced and stabilized by transfixing pins and the coracoclavicular ligaments repaired, yields the best result.

If the injury is more than two weeks old surgical repair should not be attempted. Activity should be progressed as tolerated and if the patient becomes asymptomatic and function is satisfactory no further treatment is indicated. If symptoms persist, or develop later, the distal end of the clavicle is resected and the coracoid with its tendon attachments transferred to the clavicle.

References

1. Crenshaw, A. H.: Campbell's Operative Orthopaedics, ed. 4, St. Louis, The C. V. Mosby Company, 1963.
2. Hollingshead, W. H.: Anatomy for Surgeons: The Back and the Limbs, Vol. 3, ed. 2, New York, Harper and Rowe, 1969.

To Physicians in Training

To all physicians in training and especially West Virginia residents. West Virginia is in need of physicians in all categories for rural and urban practice. Any physician desiring information concerning openings in the State can communicate with *The Journal*. *The Journal* will publish free for 6 issues pertinent information concerning any qualified physician who is seeking a location in West Virginia. Single copies of *The Journal* listing practice opportunities will be mailed to physicians upon request.

A roster containing a list of officers of county societies and specialty sections of the West Virginia State Medical Association is available upon request to the headquarters offices. Also, information pertaining to West Virginia licensing laws will be mailed to interested physicians. Interested parties may then write the officers of component societies or sections for further information.

Any other information about West Virginia will be secured from outside sources, if possible, and sent upon request. All letters to *The Journal* will receive individual immediate attention.

A Preliminary Statistical Report of X-Ray Findings In Black Lung Applicants From the State of West Virginia

Arthur E. Levy, M. D.

On request of the State Board of Vocational Education, the Division of Vocational Rehabilitation, Disability Determinations Services in Charleston, West Virginia, 1,158 claimants for Black Lung benefits were examined between the dates of June 18, 1970 and October 30, 1970. All of the 1,158 claimants during this time period were included in this study. Since the study is still going on this is only a fraction of the total number who will be examined. A total report will be rendered at a later date.

There has been great concern among the "Black Lung" applicants regarding the medical and particularly the roentgen criteria for compensation. An early report of this matter may be helpful in evaluating the volume of pneumoconiosis in Southwestern West Virginia.

The patients were examined on a PA six-foot, 14 x 17 film using techniques recommended under the Mine Health and Safety Act of 1969.[1] A PA chest was specifically requested by the above agency. Classification of the patients was carried out according to the UICC Cincinnati Classification of Radiographic Appearances of Pneumoconioses (Chart I). All patients received a film at the time of their appearance and these were interpreted. The numbers and the percentages in each of the categories may be seen on Chart II. Of interest is the fact that 13 per cent or 152 of the total of 1,158 were considered to be without evidence of pneumoconiosis. By far, the largest group was 1/1-s, making up 137 patients or 11.8 per cent. 1/1-p accounted for 11 per cent of the total. In the categories of A, B and C, there was a total of 115 patients. The total is further broken down in that category A, both ill-defined and well-defined, amounted to 77 patients or a total of 6.6 per cent. Category B, both ill-defined and well-defined, amounted to 27 patients or a total of 2.3 per cent. Category C amounted to eleven patients under ill-defined and well-defined or a total of approximately 1 per cent. The total figure of 115 cases in categories A, B and C is equal to almost 10 per cent of the total.

The Author

- **Arthur E. Levy, M. D., Chief, Department of Radiology, Appalachian Regional Hospital, Williamson.**

Chart III demonstrates some additional findings: 941 patients, or 81 per cent, had emphysema. The criteria for emphysema[3] included: (1) Flattening of the hemidiaphragms; (2) widening of the intercostal spaces; (3) elongation of the heart shadow; (4) increased radiolucency of the lungs; (5) presence of bullae. Seventy-one per cent or 836 patients manifested evidence of arteriosclerosis. Fifty-two per cent or 607 patients manifested evidence of some old inflammation. Nine per cent or 144 patients had minimal cardiac enlargement. Four patients strongly suggested carcinoma of the lung. One patient was in congestive failure. One patient had a large hiatal hernia and two patients had severe chest deformities. Three patients were suspected to have active inflammation. The patients included in Chart III were included in the total figures above regarding the classifications of pneumoconiosis.

The conclusions that may be drawn from such a study as this must include the finding of 87 per cent positive cases of pneumoconiosis in this group selected for review under the "Black Lung" survey. These men, to satisfy the law, must have had a time in the mines of over ten years and for the most part appeared in the older age groups. The requesting agency did not include the age of the patients in their requests for examination. A second important conclusion is that approximately 10 per cent of the persons surveyed have a classification of pneumoconiosis in the groups A, B and C, indicating areas of coalescent fibrosis. The third conclusion that may be drawn is that there is a high incidence of concurrent processes that are charted in Chart III. The high incidence of emphysema is only slightly lower than the high incidence of pneumoconiosis

CHART I

		Codes	Definitions
Small Opacities	Rounded Profusion		The category of profusion is based on assessment of the concentration of opacities in the affected zones. The standard films define the mid categories.
		0/- 0/0 0/1	Category 0—small rounded opacities absent or less profuse than in category 1.
		1/0 1/1 1/2	Category 1—small rounded opacities definitely present but relative few in number.
		2/1 2/2 2/3	Category 2—small rounded opacities numerous. The normal lung markings are usually still visible.
		3/2 3/3 3/4	Category 3—small rounded opacities very numerous. The normal lung markings are partly or totally obscured.
	Type	p q r	The nodules are classified according to the approximate diameter of the predominant opacities. p—rounded opacities up to about 1.5mm diameter. q—rounded opacities exceeding about 1.5mm and up to about 3mm diameter. r—rounded opacities exceeding about 3mm and up to about 10mm diameter.
	Extent	Lung zones	The zones in which the opacities are seen are recorded. Each lung is divided into thirds—upper, middle, lower zones. Thus a maximum of 6 zones can be affected.
	Irregular Profusion		The category of profusion is based on assessment of the concentration of opacities in the affected zones. The standard films define the mid categories.
		0/- 0/0 0/1	Category 0—small irregular opacities absent or less profuse than in category 1.
		1/0 1/1 1/2	Category 1—small irregular opacities definitely present but relatively few in number. The normal lung markings are usually visible.
		2/1 2/2 2/3	Category 2—small irregular opacities numerous. The normal lung markings are usually partly obscured.
		3/2 3/3 3/4	Category 3—small irregular opacities very numerous. The normal lung markings are usually totally obscured.
	Type	s t u	As the opacities are irregular, the dimensions used for rounded opacities cannot be used, but they can be roughly divided into three types. s—fine irregular or linear opacities. t—medium irregular opacities. u—coarse (blotchy) irregular opacities.
	Extent	Lung zones	The zones in which the opacities are seen are recorded. Each lung is divided into thirds—upper, middle, lower zones—as for rounded opacities.
Large Opacities	Size	A B C	Category A—an opacity with greatest diameter between 1cm and 5cm, or several such opacities the sum of whose greatest diameters does not exceed 5cm. Category B—one or more opacities larger or more numerous than those in category A, whose combined area does not exceed one third of the area of the right lung. Category C—one or more large opacities whose combined area exceeds one third of the area of the right lung.
	Type	wd id	As well as the letter 'A', 'B' or 'C', the abbreviation 'wd' or 'id' should be used to indicate whether the opacities are well defined or ill defined.
Other Features	Pleural thickening Costophrenic angle	Right Left	Obliteration of the costophrenic angle is recorded separately from thickening over other sites. A lower limit standard film is provided.
	Other sites	1 2 3	Grade 0—not present or less than grade 1. Grade 1—up to 5mm thick and not exceeding one half of the projection of one lateral chest wall. A lower limit standard film is provided. Grade 2—more than 5mm thick and up to one half of the projection of one lateral chest wall or up to 5mm thick and exceeding one half of the projection of one lateral chest wall. Grade 3—more than 5mm thick and extending more than one half of the projection of one lateral chest wall.
	Diaphragm Ill defined	Right Left	The lower limit is one third of the affected hemidiaphragm. A lower limit standard film is provided.
	Cardiac outline Ill defined (shagginess)	1 2 3	Grade 0—up to one third of the length of the left cardiac border or equivalent. Grade 1—above one third and up to two thirds of the length of the left cardiac border or equivalent. Grade 2—above two thirds and up to the whole length of the left cardiac border or equivalent. Grade 3—more than the whole length of the left cardiac border or equivalent.
	Pleural calcification Diaphragm Walls Other sites	1 2 3	Grade 0—no pleural calcification seen. Grade 1—one or more areas of pleural calcification, the sum of whose greatest diameters does not exceed 2cm. Grade 2—one or more areas of pleural calcification, the sum of whose greatest diameters exceeds 2cm but does not exceed 10cm. Grade 3—one or more areas of pleural calcification, the sum of whose greatest diameters exceeds 10cm.

Other Symbols

Obligatory
- ca —suspect cancer of lung or pleura.
- co —abnormality of cardiac size or shape.
- cp —suspect cor pulmonale.
- es —eggshell calcification of hilar or mediastinal lymph nodes.
- tba—opacities suggestive of active clinically significant tuberculosis.
- od —other significant disease. This includes disease not related to dust exposure, e.g. surgical or traumatic damage to chest walls, bronchiectasis, etc.

Optional
- ax —coalescence of small rounded pneumoconiotic opacities.
- bu —bullae.
- cn —calcification in small parenchymal opacities.
- cv —cavity.
- di —marked distortion of the intra-thoracic organs.
- em —marked emphysema.
- hi —marked enlargement of hilar shadows.
- ho —honeycomb lung.
- k —Kerley (septal) lines.
- px —pneumothorax.
- rl —pneumoconiosis modified by rheumatoid process.
- tb —inactive tuberculosis.

itself. Arteriosclerosis is clearly evident in many cases and this probably is coincidental with the advanced age of the group. Evidence of old pulmonary inflammation also was high. Cardiac enlargement, on the other hand, was only 9 per cent. Active pulmonary inflammation was found only in three patients in this group. Carcinoma of the lung was suspected in four patients.

A follow-up study of all cases surveyed under the Black Lung legislation will be reported eventually. In addition, a similar group from the state of Kentucky will be compared with this group entirely from West Virginia.

References

1. Federal Register 35:161 (Wed. Aug. 19) 1970.
2. Bohlig, H. et al: UICC/Cincinnati Classification of the Radiographic Appearance of Pneumoconioses, Chest 58:1 (July) 1970.
3. Hinshaw, H. C. & Garland, L. H.: Diseases of the Chest.

CHART II

Distribution By UICC Classification of 1,158 Patients Examined Under the Auspices of The State Board of Vocational Education for Black Lung

Classification	0/-0/0	0/1	152 (13)

Classification	p	q	r	s	t	u
1/0	40 (3.4%)	4 (.3%)	0	24 (2.1%)	26 (2.2%)	0
1/1	131 (11%)	73 (6%)	8 (.68%)	137 (11.8%)	161 (13.8%)	5 (.4%)
1/2	12 (1%)	10 (.86%)	7 (.6%)	8 (.68%)	21 (1.8%)	6 (.5%)
2/1	1 (.08%)	1 (.08%)	0	1 (.08%)	6 (.5%)	0
2/2	36 (3.1%)	20 (1.7%)	5 (.4%)	21 (1.8%)	55 (4.7%)	5 (.4%)
2/3	2 (.17%)	2 (.7%)	0	0	4 (.34%)	0
3/2	0	3 (.25%)	0	0	1 (.08%)	1 (.08%)
3/3	10 (.86%)	7 (.6%)	2 (1.7%)	12 (1%)	21 (1.8%)	2 (.17%)
3/4	0	0	0	0	0	0

Classification	id	wd	Total
A	41 (3.5%)	36 (3.1%)	77 (6.6%)
B	12 (1.0%)	15 (1.3%)	27 (2.3%)
C	4 (.34%)	7 (.6%)	11 (1.0%)

Total A, B, and C Classifications 110 (9.9%)

CHART III

Concurrent Disease Processes Seen on Examinees

Disease Process	
Emphysema	941 (81%)
Arteriosclerosis	836 (71%)
Old Inflammation	607 (52%)
Cardiac Enlargement	144 (9%)
Suspected Carcinoma	4
Congestive Failure	1
Hiatal Hernia	1
Severe Chest Deformities	2
Active Inflammation	3
No evidence of pneumoconiosis	152 (13%)
Total Cases 1,158 (100%)	

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Indications *Male:* Replacement therapy in testicular hormone deficiency states. Prevents atrophy of the accessory male sex organs following castration for as long as therapy is continued. Impotence and male climacteric symptoms when due to androgen deficiency. Primary eunuchoidism and eunuchism. Delayed puberty when established as not a simple familial trait. Indicated for those symptoms of panhypopituitarism related to hypogonadism, however, appropriate adrenal cortical and thyroid hormone replacement therapy remain of primary importance. *Female:* Palliation of androgen-responsive, advanced, inoperable breast cancer in women between 1 and 5 years postmenopausal or women in whom castration has shown the tumor to be hormone dependent. Prevention of postpartum breast manifestations of pain and engorgement; there is no satisfactory evidence that this drug prevents or suppresses lactation per se. In osteoporosis androgens may be of adjunctive value to adequate considerations of diet, calcium balance, physiotherapy and general health promoting measures. *Males and Females:* In the treatment of protein depletion states which occur in geriatric patients, in debilitation states, in chronic corticoid therapy, resistant fractures; cryptorchidism; creating a positive nitrogen balance, tissue repair and other anabolic effects. Androgenic steroids may produce a response in aplastic anemias, myelofibrosis, myelosclerosis, agnogenic myeloid metaplasia and hypoplastic anemias due to malignancy or myelotoxic drugs. Androgens are not of value in other anemias.

Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.

Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.

Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.

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Special Article

West Virginia Physicians: A Brief Statistical Evaluation

James H. Wiley, M. D.

I have been concerned for the past several months by the increasing furor in magazines, newspapers, and medical journals over the "crisis" which exists in medical care today. The existing shortage of physicians in this country has been a grave concern to writers in journals as erudite as the *New England Journal of Medicine,* and in throw-away journals and newspapers such as the *American Medical News.* I long ago learned to discount much of what is printed in American newspapers and magazines, but I failed to do this where medical material was concerned.

The health care industry at the present time is the third largest employer in the United States. By 1979 it will be *the* largest employer. Imagine, we are members of the third largest industry in the United States now, and in another nine years we will probably be employees—all of us—of the largest industry in America.

This expansion of the health care "industry" will occur both in the total number of physicians and in the number of paramedical helpers. Briefly, the number of physicians will increase from a present total of (estimated) 315,000 to a total of 402,000 in 1980. This is based on the figures of United States medical school graduates from 1960 onward. These show:

1960— 7,500 per year
1965— 7,800 per year
1970— 8,500 per year
1979—12,000 per year

Medical Economics states in the December, 1970, issue that the U. S. population has not been expanding faster than the physician supply for the past five years, contrary to all popular belief.

The degree of increase in paramedical help is even more impressive, according to the more popular writers. They state that:

1900—2 of 3 people in medical care were physicians

NOW—1 of 10 people in medical care are physicians

1979—1 of 15 or 1 of 30 —(depending on which writer is quoted)

The Author

- **James H. Wiley, M. D., The Orthopedic Clinic, 400 Drummond Street, Morgantown.**

Besides the numerical increase in physicians and physician helpers, there are other changes occurring in the physician population. The most apparent of these changes is the gradual continued decline in the numbers of "Family Practitioners," or better, "Primary Physicians." I include in these terms—general practitioners, internists and pediatricians. Actually, the pediatricians and the internists have very slight increases in their numbers, but the general practitioners have lost sharply. The figures are:

	1965	*1970*
G. P.	37.0	29.9
Internist	14.1	14.2
Pediatrician	5.9	6.2
TOTAL:	57.0	50.3

These figures—and perhaps the temper of the times—have created a rather militant attitude on the part of the A.A.G.P. They have changed their name to the American Academy of Family Practitioners, and have demanded a voice in medical education. They feel that all university associated teaching programs have too long regarded general practice as the clinical equivalent of sexual deviation—shunting them to back closets (the back of the bus) and in general denying that such a "thing" exists in the overall Family of Physicians.

An Ad Hoc Committee on Education for Family Practice appointed by the Council for Medical Education of the American Medical Association gave a rather lengthy report in 1966 stating that (1) Family Practitioners are necessary; and (2) they are declining.

An American College of Physicians Bulletin, prior to the report, stated that "the college thinks a man certified by the American Board of Internal Medicine is the ideally trained man for adult family practice as currently defined."

The Ad Hoc Committee stated that board certification was needed for family practitioners, and that recognition and status equivalent to other specialities should be given.

This set the stage for one of the more interesting legislative battles of 1970. The A.A.F.P. secured the wording of an amendment to the Public Health Service Act which stated that:

(1) 200 + million dollars would be made available to University associated medical schools to train family practitioners.

(2) That the University must create a *separate and equal* department of family practice to qualify for this financial aid.

The bill was opposed by the American Association of Medical Colleges and by a portion of the AMA. The bill, however, passed with the wording as above. President Nixon vetoed the bill in late December.

That a "primary" or "family" practitioner is desirable is self-evident to all. Who will eventually serve as such is still a matter of debate. The President of the Western Orthopedic Association in the Journal of Bone and Joint Surgery points out, in an article appropriately entitled, "The Third Laminectomy," that every person should have a family physician and the primary life purpose of the family physician should be to keep passive dependent patients out of the hands of the aggressive surgeon.

All the information above is an indication of the present and future status of medicine in the U. S. Now, how has the State of West Virginia fared in that same period of time? The figures I quote were derived from information supplied by the Medical Licensing Board of West Virginia, the State Medical Association and the American Hospital Association.

The population of West Virginia was approximately 1,800,000 in 1960, and approximately 1,600,000 in 1970. West Virginia had the greatest percentage loss (8.8 per cent) of people of all the states between 1960 and 1970.

	West Virginia		*U. S.*	
	1960	*1970*	*1960*	*1970*
G. P.	45.4	36.3	37.0	29.9
Internist	11.4	12.5	14.1	14.2
Pediatrician	3.4	4.5	5.9	6.2
Primary	60.2	53.3	57.0	50.3

West Virginia

1960—one physician/1101 people
1970—one physician/1105 people

A further breakdown of West Virginia Physicians shows:

Total Number	*1960*		*1970*	
	1635		1403	
G. P.	45.4	60.2%	36.3	53.3%
Internists	11.4		12.5	
Pediatricians	3.4		4.5	
General Surgeons	11.9		12.5	
Orthopedists	2.4		3.0	
Urologists	2.0		2.3	
O. B. — GYN.	4.5		4.6	
Radiologists	2.8		5.1	
Pathologists	2.1		2.5	
Dermatologist	1.2		1.0	
Psychiatrists	1.7		2.6	
Anesthesiologists	1.4		1.6	
E.E.N.T.	6.0		5.4	
	96.2		93.9	

These figures must be judged by the fact that the above designations were made by the physician himself and not by any Board group.

How have other groups fared in this same ten year period?

	1960	*1970*	
Physicians	1635	1403	↓ 14%
Osteopaths	116	104	↓ 10%
Chiropodist - Podiatrist		54	
Chiropractors	40 (estimate)	40 (estimate)	

How has the source of physicians changed in this period?

(Estimated) 1960—less than 10 per cent were foreign graduates.

(Estimated) 1970—more than 50 per cent were foreign graduates.

In 1970, *The West Virginia Medical Journal* listed 75 new members of the State Medical Association. Direct query of them provided 25 more new members, or a total of 100 physicians joining the State Medical Association in 1970.

The source of these new members is listed as:

Total	= 100		
W.V.U.	= 13	36%	= U. S. graduates
Other	= 23		
Philippines	= 20	64%	= foreign graduates
Other Foreign Graduates	= 44		

The West Virginia University Medical School began graduating physicians in 1962. From an initial class of 15 graduates in 1962, they have increased to a graduating class of 60 physicians in 1970. I believe that their present goal is a graduating class of 75 physicians each year. Assuming that this can be accomplished, and assuming that the average physician will practice for 30 years, then I believe that the following conclusions are tenable:

1. West Virginia—although a small state and generally considered by the average American

to be a poor state—is producing a sufficient number of physicians to care for its own population (one per 711 people if all stayed here—this is the desired ratio of the AMA.)

2. Although producing our share of physicians, we are not at the present time obtaining the services of enough of these physicians.

3. The ratio of physicians to population, although behind that of the United States average, has not changed remarkable in the past 10 years in West Virginia.

4. The ratio of foreign graduated physicians has increased markedly in the past 10 years, and is greater in West Virginia than the average for the U. S.

5. The Family Physician will always exist, but whether he will be AAFP or FACP is yet to be determined.

References

1. Official Directory of Registered Doctors of Medicine Medical Corporations and Doctors of Chiropody—Podiatry.
2. Official Directory of Registered Doctors of Medicine.

Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (not onion skin or flimsy), standard letter sized (8½ by 11 in.) white paper. Wide margins (at least 1¼ in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Authors are requested to submit a carbon copy with the original or retain same in the event the manuscript is lost in transmittal.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for cuts should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it. The author will bear the cost of all over two one-column halftone cuts.

All scientific material appearing in *The Journal* is reviewed by the Editorial Board. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 1031, Charleston, W. Va. 25324.

Electrocardiogram of the Month

Mobitz Type-II Second Degree Atrioventricular Block

Donald K. Chung, M. D., and Edward K. Chung, M. D.

A 79-year-old man with well compensated calcific aortic stenosis developed a pulmonary embolism during the recovery phase of pneumonia. Electrocardiogram (ECG) showed second degree atrioventricular (A-V) block of Mobitz type II without myocardial infarction or bundle branch block (Figure I, II-a and b). ECG taken four months earlier revealed no significant abnormality except for occasional dropped beats, every 10th to 12th P waves. He was not taking digitalis. Subsequently, a transvenous demand ventricular pacemaker was inserted because of persistent slow ventricular rate which became drug-resistant (II-c).

The Authors

- **Donald K. Chung, M. D., Cardiologist, Veterans Administration Hospital, Clarksburg, and Assistant Professor of Medicine, West Virginia University Medical Center, Morgantown; and Edward K. Chung, M. D., Professor of Medicine and Director, Electrocardiographic Laboratory, West Virginia University Medical Center.**

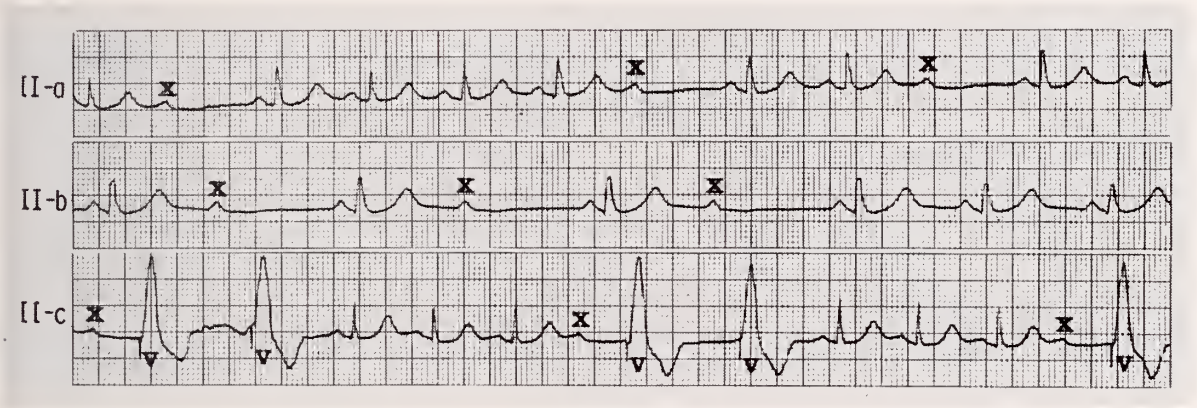

Figure 1

ECG Analysis and Comment

Second degree A-V block is characterized by an occurrence of occasional non-conducted P waves (dropped beats) due to conduction disturbance at A-V junction, bundle of His or bundle branches. When the dropped beat appears following a period of progressive lengthening of the P-R intervals with progressive shortening of the R-R intervals, the term, Mobitz type I or Wenckebach A-V block is used. On the other hand, the term, Mobitz type-II A-V block is used when a P wave is blocked periodically without having Wenckebach phenomenon.[1] Therefore, the P-R intervals vary in the former and they are fixed in the latter. The case presented here showed Mobitz type-II A-V block. Three strips in Figure I are not continuous. Lead II-a demonstrates sinus rhythm at a rate of 83 per minute with 5:4 and 3:2 Mobitz type-II A-V block. The P waves indicated by X are not conducted to the ventricles. The P-P and P-R intervals are fixed.

Lead II-b was recorded three days later and it shows sinus rhythm (rate: 62/minute) with 2:1 A-V block in most areas. Ventricular rate is only 31 per minute.

The underlying cause of chronic Mobitz type-II A-V block in this case was thought to be related to calcific aortic stenosis. Although this patient shows a normal intraventricular conduction time, Mobitz type-II second degree A-V block is usually associated with bundle branch block. In recent studies by His Bundle recordings Mobitz type-II A-V block was thought to be usually a manifestation of a diseased His Purkinje system.[2] In any event, clinical experiences[1,3] suggest that complete A-V block and Adams-Stokes syndrome are frequent complications of Mobitz type-II A-V block. Thus, differentiation between Mobitz types I and II second degree A-V block is important.[4] The case presented in this paper received a permanent demand ventricular pacemaker when he developed a drug-resistant, symptomatic high degree Mobitz type-II A-V block from a lesser degree block (II-c). Lead II-c shows sinus rhythm at a rate of 97 per minute with 4:3 Mobitz type-II A-V block and demand pacemaker induced ventricular complexes (marked V). The artificial pacemaker escapes after each dropped beat with pre-set rate of 70 per minute.

References

1. Donoso, E., Adler, L. N. and Friedberg, C. K.: Unusual Forms of Second-Degree Atrioventricular Block, Including Mobitz Type-II Block, Associated with the Morgagni-Adams-Stokes Syndrome. Am. Heart J. 67:150-157, 1964.
2. Narula, O. S., Scherlag, B. J., Samet, P. and Javier, R. P.: Atrioventricular Block: Localization and Classification by His Bundle Recordings. Am. J. Med. 50:146-165, 1971.
3. Langendorf, R., Pick, A.: Atrioventricular Block, Type II (Mobitz)—Its Nature and Clinical Significance. Circulation 38:819-821, 1968.
4. Langendorf, R., Pick, A.: Second Degree Atrioventricular (A-V) Block: Differential Diagnosis Between Type I (Wenckebach) and Type II (Mobitz) Block. Am. J. Cardiol. 26:644, 1970. (Abstract).

Read Before Posting

We never cease to be amazed at some of the things found in hospitals today. In the personnel office of a nearby well-known hospital an advertising poster on "Health Careers For People Who Care" was prominently displayed. Sponsored by The US Department of Labor in its publication "Occupation Outlook Handbook" ($6.25), the poster sought to encourage persons to choose medical and paramedical careers. Its place in the hospital personnel office seemed appropriate. A long list of careers was outlined: physicians, dentists, medical lab assistants, speech pathologists, optometrists, and physical therapists among others. Included on the list were chiropractors.

Chiropractors? Think of it! Is the US Government now officially listing chiropractors as medical personnel? Hospitals, by displaying such information, imply at least tacit approval.

We assume that chiropractors are considered by the government to be orthopedic paramedical personnel. Perhaps the Department of Labor should consider some others. How about naturopaths as paramedical help for internists? Or mediums for psychiatrists? Or astrologists for hospital administrators?

We are not surprised by this example of another bureaucratic blunder by the federal government. Its prominent display in a hospital personnel office, however, cannot but injure the public image of medicine. Perhaps hospital administrators should read material before they post it.—*Massachusetts Physician.*

Too Few Doctors?

SUN VALLEY, Idaho—Many popular cliches in the current national debate about reforming the nation's medical system were badly battered this past week at the intensive discussions of the Sun Valley Forum on National Health.

The most striking conclusion of the forum was that "a very large number of Americans are over-doctored, over-hospitalized and over-drugged." The forum thus challenged the common notion that the way to improve the nation's health is to go on increasing the volume of medical services and simply pouring more money into the medical system. Rather, the need is for better allocation and more intelligent use of existing medical resources—together with better sense in the way Americans take care of themselves.

Millions of Americans would benefit more from changing their dietary habits, losing weight, exercising, stopping cigarette smoking and cutting down or ending their consumption of alcohol and other drugs than from having more physicians and more hospitals available to treat them after their bad habits laid them low.

Prof. Victor R. Fuchs of the National Bureau of Economic Research questioned whether the United States is suffering from a great shortage of physicians. His studies indicate excess capacity among American physicians, particularly among general surgeons, some of whom operate so infrequently that one listener wondered how they can retain their skill to do complex surgery. Maldistribution of physicians, both geographically and in terms of specialties, may be at the root of complaints about a doctor shortage.

The poor in America doubtless need better medical care; poverty itself causes much physical and emotional illness. However, Professor Fuchs said, "the poor in this country probably have more access relatively to medical care than they have to most other goods and services. It is the terms and the conditions under which they receive such care that cause much of the discontent."

The effort to solve health problems with more resources rather than through better allocation and use of resources underlies the galloping inflation which has boosted the nation's health bill to about $75 billion annually, 7 per cent of the gross national product, with no end to the escalation in sight. Hospital cost reimbursement formulas used by Medicaid and Medicare were singled out for special criticism since they provide hospital managers with little or no incentive for efficiency or holding down costs.

Profs. Herman M. Somers and Anne R. Somers of Princeton University estimated that the United States health care bill will exceed $100 billion before 1975. They quoted a British critic who said, "Expenditure for medical care is a bottomless pit," while the nation's resources are limited.

The limits were stressed in another way by Dr. Charles L. Schultze of the Brookings Institution, who argued against trying to put the whole cost of the nation's medical care on the shoulders of the taxpayers. The nation has many other very high priority tasks—for example, rebuilding the slums of the inner city—which can only be accomplished through the tax system. So far as possible, therefore, Doctor Schultze maintained, the cost of medical care should be paid through the private sector, not loaded onto the already overburdened Federal budget. About 70 per cent of the nation's citizens, he argued, can afford to meet their medical costs—except for catastrophic illness—from their earnings without outside help.

At a time when Congressmen are starting to try to outbid each other on massive new programs for national health care, the Sun Valley Forum has raised some cautionary flags about the kind of programs that are really needed and can do the most good. The nation doesn't yet know why the existing huge outlays on medical care do not produce better results. And it could use more evidence—from sizeable experiments in new medical delivery systems—before rushing into a radical restructuring of the entire medical system. With so many tough questions, so few sure answers, and limited resources, the immediate need is for programs that zero in on high-priority goals, such as directly providing physicians and medical services under decent conditions for the poor in urban slums and for many in remote rural areas, and tightening cost controls and increasing incentives for efficiency for those who manage the nation's hospitals.—*By Harry Schwartz, Member of the Editorial Board of the New York Times.*

American Heart Association Program Nov. 11-14

The American Heart Association's 44th Annual Scientific Sessions are scheduled for November 11 through November 14 in the Anaheim, California, Convention Center.

Programs on clinical cardiology and concurrent sessions on various phases of cardiovascular research and medicine will be offered. There also will be lectures, panels and symposia; and recently produced cardiovascular films will be screened.

The AHA's Council on Arteriosclerosis will hold its annual scientific meeting on Tuesday and Wednesday, November 9-10, immediately preceding the AHA Scientific Sessions.

Also on Wednesday, November 10, special postgraduate seminars will be held under sponsorship of AHA Scientific Councils, and the Council on Clinical Cardiology's Laennec Section will present a scientific program.

On Thursday evening, November 11, a series of Cardiovascular Conferences will be devoted to discussions on CV problems by small groups. Talks will be held on a variety of cardiovascular topics during "How To" sessions on Saturday, November 13.

A message from . . .

The President

THE YEAR AHEAD

We have just completed another successful meeting at The Greenbrier. We met and worked with many friends and colleagues and missed, very much, those who could not attend.

This upcoming year promises to test organized medicine in a severe fashion on several fronts. Nationally, a presidential campaign, with health care a major issue, will perfuse us with an overdose of propaganda, promises and panaceas sufficient in volume to give the nation indigestion.

Statewise, we must set priorities and timetables for action on and evaluation of the alphabetical entities that are at work regulating medicine in our own environment. Internally, we will continue to strengthen our effectiveness in representing you, our members.

All this means that we face a lot of hard work on old and new problems. Our goals this year will be to out work and out think the opposition. With your blessings and support we will do just that.

Harry S. Weeks, Jr. M.D.

Harry S. Weeks, Jr., M. D., *President*

THE WEST VIRGINIA MEDICAL JOURNAL

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EDITORIALS

EFFECT OF EXERCISE ON GASTROINTESTINAL DISORDERS

Presumably not much is known of the effects of physical exercise on patients who have gastrointestinal disorders. Physicians advise them in a general way and use expressions, such as "light exercise," "moderate exercise," and "not too strenuous exercise." It is recognized that it is difficult to give precise instructions to these patients concerning the exact amount and kind of exercise they should take. The matter is of especial interest this time of the year, since most academic institutions start their athletic programs in the late summer and early autumn.

There are so many disorders of the digestive system that within the limits of this editorial only a few may be considered. One of the relatively common disorders is peptic ulcer, either of the stomach or the duodenum. The physician is often asked whether an athlete who has a peptic ulcer should engage in vigorous sports, such as football or basketball. It must be remembered that farmers may suffer from peptic ulcer and while under ulcer management continue to do heavy physical work for long hours. The great majority of these men appear to get along quite well indeed. In view of this, it is not illogical to maintain that athletes who have a peptic ulcer should be able to continue their strenuous exercise. It is known that there are professional football and baseball players who have a peptic ulcer and apparently do not experience any deleterious symptoms. Obviously, all athletes who do have a peptic ulcer should be under careful medical management. If they complain of tenderness or pain or if there is any indication of bleeding, exercise should of course be materially curtailed.

On the whole, little is known about the effects of exercise on the functions of the liver, pancreas and on the small and large intestine. It is in order, however, to discuss briefly the effect of exercise on certain disorders of the colon and the liver. The term colitis should be used only if there is inflammation of the colon; in this condition exercise should be strictly limited. If the colon is merely irritable, such as is found in the spastic or mucocus type, a moderate amount of exercise is thought to be helpful; strenuous exercise should not be encouraged.

Chalmers et al[1] reported a comprehensive and well controlled study of the effect of strenuous reconditioning on 88 young patients early in their convalesence from acute infectious hepatitis. No evidence was observed that strenuous exercise early in their convalesence precipitated relapses of infectious hepatitis. Among other things, they observed that patients allowed moderate activity got along better than those kept inactive. This work was confirmed recently by Repsher and

Freebern,[2] who made observations on 199 young men who were subjected to very severe exercise. In evaluating these results it must be remembered that the studies were made on young individuals, and furthermore they must not be construed as advising vigorous exercise during convalescence from all disorders of the digestive system.

Cirrhosis of the liver which generally occurs in middle age and seldom affects young people, usually starts gradually and it is not thought that exercise has any influence on its development. Later, when gastrointestinal symptoms, such as anorexia, nausea, and abdominal pain occur, exercise should be strictly limited.

In the final analysis, the amount and type of exercise advised by physicians to patients who have gastrointestinal disorders should be carefully considered. If possible, the amount of exercise should be expressed in quantitative terms, for example, the number of blocks the patients should walk each day, or the number of holes of golf they would be allowed to play. The entire matter is an important one and doubtless needs further observations and careful study.

1. Chalmers, T. C. et al., J. Clin. Invest. *34*: 1163, 1955.
2. Repsher, L. H. and R. R. Freebern. New Eng. J. Med. *281*: 1393, 1969.

HMO's

A Health Maintenance Organization, (HMO), as presently considered, is supposed to provide a comprehensive range of medical services in a single group or medical organization with convenient patient access to all services. Payment is to be fixed by contract price paid in advance by all subscribers. Services are apparently to be provided at the patient's request or demand.

Those of us who have practiced in the days of "List Practice" and through third party prepayment under U.M.W., Blue Cross-Blue Shield, Medicare, and Medicaid know full well the problems of the providers when there are no brakes or guidelines applied to the demands of members of that segment of the population who feel that because they or others have paid the dues required for their membership in the plan they must demand enough care to get their money's worth.

We should try to bring our experience to the attention of those who would further initiate these schemes. We should also honestly guide and criticize our own actions and treatments so that we conscientiously care for the sick person regardless of his status, and refuse to be duped or coerced by anyone.

Doctors who have experienced these urgent, repetitive, frequently unnecessary, and often unjustified demands for examinations, studies, tests and treatments already know some of the failures of an open-ended scheme such as HMO.

Statement on Venereal Disease

The American Medical Association Council on Environmental and Public Health reports that gonorrhea ranks first and syphilis third among the reportable communicable diseases in the United States. For the year ending June 30, 1970, infectious syphilis rates were eight per cent higher nationally than a year earlier, with annual increases spread over 33 states and an estimated incidence between 70-80,000 reported cases. There are 250,000 cases of all forms of syphilis estimated to be diagnosed and treated each year.

At the same time, gonorrhea morbidity exceeded 573,000 reported cases. Gonorrhea is pandemic in the United States, with an estimated two million cases.

The Council urges medical societies to acquaint their membership with the growing and alarming dimensions of the VD problem. Physicians should take all appropriate measures to reverse the rise in venereal disease and bring it under control.

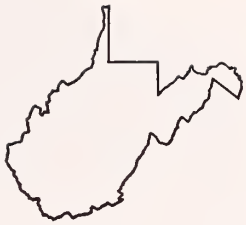
Physicians in private practice treat approximately 80 per cent of the syphilis and gonorrhea that comes to diagnosis but report to public health departments only one out of every eight cases of syphilis and one out of every nine cases of gonorrhea they treat. Physicians should assist public health departments by reporting the VD cases they treat. Medical societies are urged to cooperate and give broad support to public health authorities. Much effort must still be made by health departments and medical societies to foster mutual trust so that public and private medicine can work effectively for the control of both syphilis and gonorrhea.

The Council also urges medical societies to continue efforts for the enactment of state laws to permit physicians legally to treat VD cases of minors without obtaining parental consent. Twenty-nine states and the District of Columbia now have laws which permit physicians to treat a minor for VD without adult consent.

The American Medical Association is making VD a national theme for Community Health Week—1971, with suggested dates of October 17-23. Informational and promotional materials will be available for medical societies. The AMA publication "PR Doctor," January 1971, featured the problem of venereal disease, which included reports of excellent programs underway by state medical societies.

The Council encourages the publication of more articles in professional journals on veneral disease and its control for the guidance of the profession. Medical societies are asked to support education of patients and the public through more extensive and imaginative use of all available media and through school curricula.

GENERAL NEWS



24th Annual Rural Health Conference At Jackson's Mill on Sept. 23

The 24th Annual Rural Health Conference will be held at Jackson's Mill on Thursday, September 23, and more than 300 persons are expected to attend the one-day meeting. The Conference is open to members of all interested groups and an invitation to attend the meeting is being extended to members of local farm bureaus, home demonstration councils, agricultural extension workers and personnel of the state and local health departments.

Martha J. Coyner, M. D.

The Conference is sponsored annually by the West Virginia State Medical Association in cooperation with the West Virginia Home Demonstration Council, the Cooperative Extension Service of West Virginia University, the State Department of Health and the West Virginia Farm Bureau.

Dr. Martha Jane Coyner of Harrisville, Chairman of the Rural Health Committee of the State Medical Association, will call the meeting to order in the Assembly Hall promptly at 10:00 A.M.

Doctor Coyner announced that the first speaker at the morning session will be Mr. Ronald G. Bryant of Charleston, Public Health Advisor of the State Health Department's Bureau of Venereal Disease Control. His subject will be "VD—Today and Tomorrow."

The next speaker will be Mr. William Swecker, Administrative Assistant in the State Health Department's Family Planning Project. He will discuss the "West Virginia Family Planning Program."

The final portion of the morning program will be devoted to a progress report on "Project Sound Off for Mental Health." A representative of the Governor's Comprehensive Health Planning Advisory Committee will present a report on a series of open community forums being held throughout the State to identify the strengths and weaknesses in the present system of delivery of mental health services.

Ample time will be allotted for a question and answer period with active audience participation.

Luncheon will be served in the Mt. Vernon Dining Hall at 12:15 P.M. with the West Virginia State Medical Association as host.

Afternoon Session

Dr. Harry S. Weeks, Jr., of Wheeling, President of the State Medical Association, will deliver the address of welcome at the opening of the afternoon session.

The remainder of the afternoon program will be devoted to a discussion of the "Hazards of Pesticides." The speaker will be Mr. David O. Quinn of Morgantown, State Extension Program Leader for the Safe Use of Pesticides and Chemicals.

Advisory Committee

The program for the Conference was planned by members of the Advisory Committee to the State Medical Association's Rural Health Committee.

In addition to Doctor Coyner, the other members are Miss Mildred E. Fizer, State Chairman, 4-H and Youth Development Programs and Women's Extension Education Program; Mrs. George D. Walker of Martinsburg, President of the West Virginia Home Demonstration Council; Miss Gertrude Humphreys of Morgantown, former State Extension Home Demonstration Leader; Dr. N. H. Dyer, State Director of Health; and Miss Loutellus M. Stout, Executive Secretary of the West Virginia Farm Bureau.

Convention Story Will Appear In October Journal

The 104th Annual Meeting of the West Virginia State Medical Association was being held at The Greenbrier in White Sulphur Springs as this issue of *The Journal* went to press.

The full convention story, including information concerning new officers of both the State Medical Association and Auxiliary, as well as heads of sections and affiliated societies and associations, will be carried in the October issue.

Malpractice Article Reprints Available to Doctors

"Malpractice Risks in Cardiac Arrest Are Rising," an article by malpractice defense attorney Jack E. Horsley, has been reprinted by the American Heart Association for distribution to physicians, hospitals, medical schools, industrial medical services, various training programs and dental and nursing associations.

Reprinted from *Medical Economics*, this article illustrates the dangers of malpractice suits arising from cardiac arrest situations, and emphasizes that courts now expect a physician to be able to perform external cardiopulmonary resuscitation if a cardiac arrest occurs in his office.

Copies of the article may be obtained through the West Virginia Heart Association, 211 Thirty-fifth Street, S. E., Charleston 25304; or the American Heart Association's central office at 44 East Twenty-third Street, New York City 10010.

Helium Therapy Proposed For Heart Patients

Two Philadelphia researchers have proved the feasibility of using helium to reduce the number of heart attack victims who die from ventricular fibrillation before they reach the hospital.

Dr. Victor P. Satinsky and Robert J. Toltzis of the Hahnemann Medical College and Hospital reported their results at the 120th annual American Medical Association meeting in Atlantic City, New Jersey, in June.

To simulate coronary occlusion in humans, Doctor Satinsky performed acute coronary artery ligation—tying off the artery to the heart—in dogs. The 22 animals which did not receive the special gas mixture of 20 per cent helium, 30 per cent oxygen and 50 per cent compressed air developed ventricular fibrillation within two hours.

Doctor Satinsky said he found this mixture to be an effective deterrent to ventricular fibrillation in 17 of the 18 receiving it subsequent to coronary artery ligation, as well as pre-ligation. The one animal which developed fibrillation received the mixture 15 minutes post-ligation.

Toxic effects have not been observed in dogs receiving the helium mixture, and the investigators feel helium therapy for coronary occlusion will have significant application.

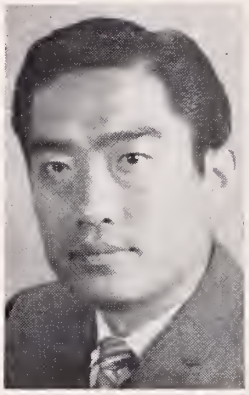
Doctor Satinsky told the National Society for Medical Research News Service, "The helium therapy will not prevent a heart attack, but it will prevent the deaths of many patients due to ventricular fibrillation."

He said this therapy can reduce the 65 per cent who die on the way to the hospital to six per cent.

Clearance is being sought by Doctor Satinsky to apply the techniques to human patients, a process that may take two to three months.

Postgraduate Cardiology Course At WVU October 7-9

A postgraduate course in "Diagnostic and Therapeutic Approach to Cardiac Arrhythmias" will be offered by the American College of Cardiology and West Virginia University October 7, 8 and 9 at the WVU Medical Center in Morgantown.



Edward K. Chung, M. D.

Thursday Morning Session

Dr. Edward K. Chung, the Course Director; and Professor of Medicine and Director of the Electrocardiographic Laboratory at the WVU School of Medicine, said that the Thursday morning, October 7, program will include these papers and speakers:

"How to Approach Cardiac Arrhythmias," Dr. Edward Chung.

"Mechanism, Diagnostic Criteria and Clinical Significance of Extrasystole," Dr. Henry J. L. Marriott, Director of Clinical Research, Rogers Heart Foundation, St. Petersburg, Florida, and Clinical Professor of Medicine, Emory University School of Medicine, Atlanta, Georgia.

"Diagnostic Criteria and Clinical Significance of Atrial Tachyarrhythmias," Dr. Hans H. Hecht, Blum-Riese Professor of Medicine and Physiology and Head, Section of Cardiology, Department of Medicine, the University of Chicago Division of the Biological Sciences and the Pritzker School of Medicine, Chicago, Illinois.

"Paroxysmal vs. Non-Paroxysmal A-V Nodal Tachycardia," Dr. Donald K. Chung, Assistant Professor of Medicine at WVU and Director, Electrocardiographic Laboratory, Veterans Administration Hospital, Clarksburg.

"Diagnosis and Clinical Significance of A-V Dissociation," Dr. Edward Chung.

"Recognition and Clinical Significance of Bilateral Bundle Branch Block and Trifascicular Block: Contribution of HIS Bundle Recordings," Dr. Rashid A. Massumi, Associate Professor of Medicine, George Washington University School of Medicine, Washington, D. C., and Chief Cardiologist, General Hospital, in Washington.

Friday Morning Program

The Friday morning, October 8, agenda will include these papers:

"Type I (Wenckebach Type) vs. Type II Second Degree A-V Block," Doctor Marriott.

"Differential Diagnosis Between Supraventricular Tachyarrhythmias and Ventricular Tachyarrhythmias," Doctor Massumi.

"Intra-Atrial and Esophageal Electrography in the Diagnosis of Cardiac Arrhythmias," Doctor Massumi.

"Diagnostic Criteria and Clinical Significance of Parasystole," Dr. Edward Chung.

"Recognition of Malfunctioning Artificial Pacemaker," Dr. Robert J. Marshall, Professor of Medicine and Chief, Cardiopulmonary Division, WVU School of Medicine.

"Diagnosis and Clinical Significance of Wolff-Parkinson-White Syndrome," Doctor Hecht.

"Cardiac Arrhythmias in Pediatric Age Group," Dr. George H. Khoury, Associate Professor of Pediatrics and Chief, Division of Pediatric Cardiology, WVU School of Medicine.

Saturday Morning Agenda

On Saturday morning, October 9, papers and speakers will include:

"Drug Therapy for Supraventricular Tachyarrhythmias," Dr. Lowell T. Mouser, Assistant Professor of Medicine, WVU School of Medicine.

"D. C. Shock for Various Tachyarrhythmias," Dr. Donald Chung.

"Drug Therapy for Ventricular Tachyarrhythmias," Doctor Marriott.

"Artificial Pacemaker for the Management of Bradyarrhythmias," Doctor Marshall.

"Artificial Pacemaker for the Management of Drug-Resistant Tachyarrhythmias," Doctor Mouser.

"Management of Digitalis-Induced Arrhythmias," Dr. Edward Chung.

Group workshops will be held on the afternoons of October 7-8, with a question-and-answer period scheduled on Saturday afternoon, October 9, Dr. Edward Chung said.

Enrollment for the course will be limited to 50, and advance registration has been requested. Enrollment fees will be $75 for members of the American College of Cardiology and $125 for nonmembers.

Nuclear Power Product and Cancer

Mice with cancer triggered by tritium, a nuclear power plant by-product, have been found to contain residual tritium activity approximately 50 times less than the maximum permissible level in effluent as recommended by the Atomic Energy Commission.

Dr. Dieudonne J. Mewissen of the University of Chicago completed a seven-year study which indicates that this particular radioactive element does increase the incidence of cancers in mice.

He pointed out that tritiated water is released into the environment as an effluent from nuclear power plants, and that this tritium may spread up the food chain until it reaches humans.

Doctor Potterfield in New Post

Dr. Thomas G. Potterfield, a Charleston pediatrician, is the new Medical Director for the West Virginia Department of Welfare's Crippled Children's Services. Welfare Commissioner Edwin F. Flowers said Doctor Potterfield, an Associate Medical Director of the crippled children's program since 1966, will serve on a part-time basis, and will continue in private practice.

Dr. Joseph Skaggs To Head TB, RD Association

Dr. Joseph T. Skaggs, Charleston allergist and internal medicine specialist, will be installed as President of the West Virginia Tuberculosis and Respiratory Disease Association during that group's 51st Annual Meeting at Charleston's Daniel Boone Hotel September 30.

Also on the agenda for the 7 P.M. session will be election of other officers; consideration of constitution and by-law revisions; election of directors from county organizations, and announcement of program activities for the coming year.

Mr. Robert W. Havens of Vienna currently is the Association's President.

Dr. Carl Hall Candidate For AAGP Board

Dr. Carl B. Hall of Charleston will be a candidate for the American Academy of General Practice's Board of Directors when that 31,000-member organization's 23rd Annual Scientific Assembly convenes in Miami Beach, Florida, in October.

The Assembly is scheduled for October 4-7 in the Miami Beach Convention Hall, but the AAGP's Congress of Delegates will meet in annual session at 10 A.M. on October 2 at the Fontainebleau Hotel "to receive and act upon the reports of officers and committees, to elect officers and to transact any and all other business that may be placed before the Congress."

The West Virginia Chapter of the AAGP formally endorsed Doctor Hall's candidacy for the Board at its annual meeting this year at Wheeling's Oglebay Park.

Bronco Junction Dedicates New 'Nerve Center'

Dedication ceremonies were held Sunday, July 25, for a new conference and classroom center at Bronco Junction, a summer camp for asthmatic children in Putnam County, near Charleston.

The Herman G. Canady Center is named for the late President of Allergy Rehabilitation Foundation, Inc., which sponsors the camp on a 176-acre tract of meadows and woodland.

Dr. Herman G. Canady, head of the Foundation at the time of his December 1, 1970, death, formerly was Chairman of the Psychology Department at West Virginia State College at Institute.

Dr. Merle S. Scherr of Charleston, Bronco Junction's Medical Director, said the new facility will serve as the camp's "nerve center" by providing classroom, conference, lecture and research space.

The building was completed shortly before the June 20 opening of Bronco Junction's fourth eight-week program. The 76 campers this year included 62 asthmatic children from 18 states, and 14 other children of the seven attending physicians.

Clean Air Program To Stress Community Involvement

A "Clean Air Workshop" will be sponsored by the West Virginia Tuberculosis and Respiratory Disease Association from 9 A.M. to 4 P.M. on Thursday, September 30, at Charleston's Daniel Boone Hotel.

A number of civic, women's and other organizations will cooperate with the Association in presenting the program, which will emphasize community involvement in working toward improved air quality.

To be open to the public, the workshop will precede the Association's annual business meeting scheduled for 7 P.M. on September 30, also at the Daniel Boone.

Speakers for the workshop, and their general topic areas, will include:

Dr. John Middleton, Director of the National Environmental Council with offices in Baltimore, Maryland, Federal air quality standards.

Mr. Joseph Bergen, air pollution specialist for the National Tuberculosis and Respiratory Disease Association, with offices in New York City, why voluntary organizations should become involved in air quality matters.

Mr. Paul Kaufman, Charleston attorney and former State Senator, air pollution laws in West Virginia.

Mr. Carl G. Beard, II, Executive Director of the West Virginia Air Pollution Control Commission, air quality problems in West Virginia.

Mr. Ralph Morgan, Executive Director of the Oklahoma Tuberculosis and Respiratory Disease Association, citizen's organizations and activities in air quality programs.

A representative of industry, to speak on that sector's role in air quality activities.

Innovative Medical School Chooses First-Year Class

Forty students have been accepted in the first-year class of the new, innovative Medical School at the University of Missouri-Kansas City, according to Dr. E. Grey Dimond, Provost for Health Sciences at UMKC.

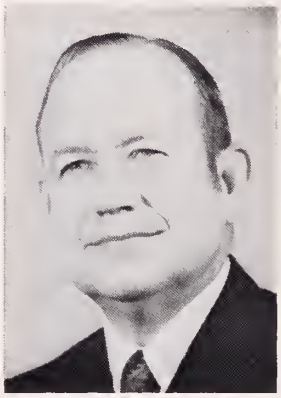
The group—consisting of 39 teenagers, including three 16-year-olds—began August 30 a specially structured curriculum which, by utilizing 48 weeks of each calendar year, will enable the student in the course of six calendar years to earn both the baccalaureate and medical degrees.

Change of Address

Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. Notices should be mailed to Box 1031, Charleston, West Virginia 25324.

W. Va. Heart Association Meeting Sept. 17-18

The West Virginia Heart Association will hold its Annual Meeting and Scientific Session on Friday and Saturday, September 17 and 18, at the Stonewall Jackson Hotel in Clarksburg.



Forest A. Cornwell, M. D.

Thomas J. Tarnay, M. D.

Scientific sessions for both medical and non-medical personnel will be held on both Friday and Saturday mornings. Committee meetings on Friday afternoon will be followed by an initial General Assembly session, to be followed by panel discussions.

Friday evening's program will include a social hour and the Annual Membership and Awards Banquet.

The election of new Board of Directors members will be a part of a second General Assembly agenda at 11:30 A.M. on Saturday.

Committee meetings on Saturday afternoon will be followed by the Board of Directors Banquet and a Board meeting at which new officers will be elected.

Dr. Forest A. Cornwell of Beckley, the Association's President, will be in charge of the Friday morning, September 17, scientific session for medical personnel. The Association's President Elect is Dr. Thomas J. Tarnay of Morgantown, with other current officers including Mrs. Ethel Cox of Charleston, Secretary, and Mr. Peter S. White, also of Charleston, Treasurer.

Friday Morning Sessions

The following papers will be offered at the Friday morning session for medical personnel:

"Direction of Coronary Care," a report on the National Coronary Care Conference, Harold Selinger, M. D., Charleston.

"Rhythm Disturbances in the Coronary Care Unit," Edward K. Chung, M. D., Professor of Medicine and Director, Electrocardiographic Laboratory, West Virginia University Medical Center, Morgantown.

"Electrical Hazards of Equipment Used in the Care and Treatment of Patients with Coronary Disease," Frederick M. Cooley, M. D., Charleston.

"Pacemakers," Doctor Tarnay, who is Associate Professor of Surgery at the WVU School of Medicine in Morgantown.

Mr. H. K. Lindamood of Morgantown, Vice Chairman of the Heart Association's Board, will preside at the Friday morning non-medical session at which Doctor Tarnay also will speak on pacemakers. Other papers at that session will include:

"Risk Factors in Coronary Disease," Morris H. O'Dell, M. D., Charleston.

"Diet in Coronary Disease," Margaret Albrink, M. D., Professor of Medicine, WVU School of Medicine.

"Community Coronary Care Services," Sam Fox, M. D., National Institutes of Health, Bethesda, Maryland.

Saturday Morning Program

The Saturday morning, September 18, medical session, with Michael Wilson, M. D., of the WVU School of Medicine presiding, will offer these papers:

"Continuing Education in Coronary Care," Robert J. Marshall, M. D., Professor of Medicine, WVU School of Medicine.

"Stress Testing and Physical Exercise," Doctor Fox.

"Examination of the Heart in Acute Coronaries," D. Sheffer Clark, M. D., Huntington.

"Medication in the Coronary Care Unit," William Carter, M. D., Charleston.

Mr. Vincent Ritzenthaler of Wheeling will preside at the Saturday morning non-medical session, with papers to include:

"Pre-Coronary Care," Doctor Carter.

"Surgery in Acute Coronary Care," Doctor Tarnay.

"How to Treat the Coronary," Doctor Selinger.

"Ask the Expert," a panel discussion, with Doctor Selinger as Moderator and Doctor Tarnay, Doctor Carter and Doctor Fox also participating.

Psychiatric Aspects of Practice Cleveland Course Topic

The Cleveland Clinic Educational Foundation in Cleveland, Ohio, will offer a postgraduate course on "Psychiatric Aspects of Medical Practice for the General Physician" October 6 and 7.

The course registration fee will be $45, with acceptances in the order of applications. The course will be presented by staff members and a list of guest speakers, and it has been approved for 8¾ prescribed hours of credit by the American Academy of General Practice.

Further information may be obtained by writing The Cleveland Clinic Educational Foundation, 2020 East Ninety-Third Street, Cleveland, Ohio 44106.

Board Members Reappointed

Gov. Arch A. Moore, Jr., has reappointed Dr. Maynard P. Pride, Morgantown surgeon, and Dr. Robert R. Maury, a Wheeling chiropodist, to the Medical Licensing Board of West Virginia for new five-year terms to end June 30, 1976.

Looking Back 10 Years . . .

Dr. Kenneth E. Penrod (left), then Vice President of West Virginia University for the Medical Center, was keynote speaker for the Rural Health Conference at Jackson's Mill in October of 1961. Others in the picture are Dr. Charles E. Staats of Charleston, then Chairman of the State Medical Association's Rural Health Committee; and Miss Gertrude Humphreys of Morgantown, then a member of the Advisory Committee to the Rural Health Committee.

Obstetricians, Gynecologists To Meet in State

The Central Association of Obstetricians and Gynecologists will hold its annual meeting at The Greenbrier in White Sulphur Springs September 23 through September 25.

This will mark the first time that the Association has held its meeting in West Virginia. The organization has membership from 33 states.

In addition to the various papers which will be presented at the meeting's scientific sessions, Dr. C. J. Dewhurst, Professor of Obstetrics and Gynecology at the Institute of Obstetrics and Gynecology, Queen Charlotte Institute, and Chelsea Institute, London, England, will serve as the annual guest lecturer. His topic will be "The Assessment of Fetal Maturity and Dysmaturity."

The Presidential Address by Dr. Thomas McElin of Evanston, Illinois, will be on the subject "The Lament of the White Rabbit." There will be a panel discussion, featuring a number of outstanding speakers, on "Practical Gynecological Endocrinology."

The local arrangements committee for the meeting is headed by Dr. John Battaglino, Jr., of Wheeling, as Chairman; Drs. Robert Brandfass and Robert Holtrop, both also of Wheeling, and Dr. John Chambers of Charleston.

Speakers from a number of cities, including Minneapolis, Minnesota; Detroit and Grand Rapids, Michigan; Indianapolis, Indiana; New Orleans, Louisiana; Houston, Texas; Chicago, Illinois; Cleveland, Ohio, and Salt Lake City, Utah, will present a series of more than 15 scientific papers during the meeting.

The local arrangements committee will host one of the social events on the program, a cocktail hour under auspices of the Wheeling Obstetrical Society.

1971-72 Course Schedule Announced by ACP

A schedule of postgraduate medical education courses again has been arranged by the American College of Physicians for the 1971-72 academic year.

Tuition fees for each course remain at $80 for ACP members and Fellows, $125 for nonmembers and $40 for associates. Detailed information about the courses may be obtained by writing to:

Dr. Edward C. Rosenow, Executive Director, American College of Physicians, 4200 Pine Street, Philadelphia, Pennsylvania 19104.

Here is the schedule of courses:

September 6-10—"Organ Failure: Heart, Lung, Kidney, Liver, Marrow," Halifax, Nova Scotia, Canada.

September 20-24—"The Psychological Basis of Endocrine and Metabolic Diseases," Durham, North Carolina.

October 18-22, "The Rheumatic Diseases—Pathology, Immunology, Diagnosis and Treatment," Boston, Massachusetts.

October 21-23—"Diabetes—An International Review—The 50th Anniversary of Insulin," Indianapolis, Indiana.

October 25-29—"Recent Progress in Clinical Cancer," an interdisciplinary approach to cancer and its management, New York City.

November 1-5—"Respiratory Pathophysiology," Montreal, Canada.

November 3-5—"Current Concepts in Clinical Infectious Diseases," Charlottesville, Virginia.

November 15-17—"Clinical Gastroenterology for the Internist," Boston, Massachusetts.

November 15-19—"Clinical Uses of Radionuclides: Critical Comparison with Other Techniques," Oak Ridge, Tennessee.

November 17-19—"Solving Problems in Clinical Hematology," Birmingham, Alabama.

November 17-19—"Internist Participation in Rehabilitation," Rochester, Minnesota.

January 3-7—"Workshops in the Physiology, Pathophysiology and Diagnosis of Disorders of Electrolyte and Acid-Base Metabolism," Philadelphia, Pennsylvania.

February 1-3—"Understanding and Managing Eczematous Diseases," Portland, Oregon.

February 7-9—"Gastroenterology—Digestion and Disorders of Digestion," Rochester, Minnesota.

February 23-25—"Diagnosis and Management of Infectious Diseases," Los Angeles, California.

March 6-10—"Physiologic Concepts in Internal Medicine," Dallas, Texas.

March 7-10—"Recent Advances in Clinical Endocrinology," Boston, Massachusetts.

March 20-24—"Specifically Treatable Disease," emphasizing pathophysiology and early clinical findings, Philadelphia, Pennsylvania.

March 27-29—"The New Face of Pulmonary Disease," Los Angeles, California.

April 5-7—"Cardiology for the Internist," Houston, Texas.

May 15-19—"Neurology and the Internist," New York City.

May 22-26—"Management of Common Chronic Medical Diseases," Lexington, Kentucky.

May 24-26—"Progress in Nephrology," Washington, D. C.

June 8-10—"Advances in Clinical Gastroenterology," New Haven, Connecticut.

June 12-16—"Modern Concepts in Clinical Cardiology," Cincinnati, Ohio.

June 12-16—"Advanced Psychiatry and the Internist," Baltimore, Maryland.

June 19-23—"Clinical Immunology," Montreal, Canada.

June 26-29—"Perspectives in Cancer Medicine," Buffalo, New York.

Temporary Slowdown Explained In Medicare Payments

Payment of Medicare claims in Ohio and West Virginia have been slowed temporarily, Mr. E. M. Erickson, Vice President of Nationwide Insurance, explained from his Columbus, Ohio, office.

Mr. Erickson said the slowdown has been caused by a necessary change in the system Nationwide uses to process Medicare claims; and by increased responsibility assumed on July 1 when Nationwide took over claims processing for a five-county area in northeastern Ohio.

The change in systems was necessary, Mr. Erickson said, because the former system had a limited capacity. The number of Medicare claims to be processed is increasing steadily, and the old system was being used close to the limit of its capacity.

"The new system, when it becomes fully operational, will increase our capability to process more claims and to improve service to beneficiaries and to providers of health care service," Mr. Erickson explained.

"Like any new and complex system, some hitches have to be worked out as it is started up. We are ironing out these problems and are confident that we will have the new system functioning smoothly soon," he added.

Mr. Erickson noted that beneficiaries who already have submitted claims should not resubmit those same claims. Resubmissions of claims causes duplication of effort and unnecessary delays, he said.

Doctor Kellas Appointed

Dr. George M. Kellas, Director of Medical Education at Wheeling Hospital in Wheeling, has been appointed to the Manpower Committee of the West Virginia Regional Medical Program. Doctor Kellas also is the current Vice Chairman of the West Virginia Joint Council on Teaching Hospitals.

Some Immunization Levels Low Despite Compulsory Law

Gov. Arch A. Moore, Jr., signed into law last March 5 a legislative enactment requiring, for the first time, immunization of all children entering school against Rubella (German measles).

State law also requires immunization against Rubeola (regular measles), polio, diphtheria, whooping cough, tetanus and smallpox. Dr. N. H. Dyer, West Virginia's Health Director, believes that while the immunization statute is adequately enforced in most areas, there still are several counties in which this does not appear to be the case.

Twenty-three cases of Rubeola were recently reported in a West Virginia county adjoining a state in which over 500 cases occurred. The first case in the county was discovered in a school 22 miles from the neighboring state. "Thirteen of the 29 reported cases were found in three families," Doctor Dyer said. "The remaining cases were discovered in 10 additional families. To the best of our knowledge, nine of these patients were previously immunized. We could not determine, however, if the children were immunized too early in life; if a killed virus was used, or if some of this group could have been among that small percentage of individuals who do not respond to the protection that the vaccine normally offers."

Of the 23 cases, nine were 0-5 years of age, nine were 6-11 years, four were teenagers and one was a 28-year-old. "The eight children who were 6-10 years of age should have been previously immunized, since the law making regular measles vaccine mandatory became effective in 1967," Doctor Dyer explained. "In this particular area, these school children who should have been previously immunized were the major disseminators of the disease."

An increase in the measles caseload has been a topic of concern at several recent immunization conferences. The national increase in measles in 1969, as compared to 1968, was 90.3 per cent. West Virginia's increase for the same period was 31.5 per cent.

"From the standpoint of increased caseload, West Virginia ranks 40th, and perhaps this is due to a good overall program," Doctor Dyer observed. "However, since the supply of measles vaccine has been lean since the inception of the Rubella program, it might be best to assume that a little luck could have been involved in our success. At any rate, we will continue to concentrate on immunizing as many susceptibles as possible."

There also has been concern over low immunization levels for both polio and diphtheria. Immunization levels in San Antonio, Texas, where epidemics of diphtheria occurred, were no lower than the national average. This would indicate that many areas in the nation have the potential for epidemic situations.

Doctor Dyer said that the State Health Department conducted an immunization survey in West Virginia two years ago and found that 20 per cent of the children in the 1-14 age group had never received oral polio vaccine, and 13 per cent had not completed the series.

"The major problem is in the 1-4 age group where almost 25 per cent of our children were unprotected, and 17 per cent had not completed the series. There is little reason to believe that this situation has improved, since there have been times since then that we lacked an adequate supply of polio vaccine," Doctor Dyer noted.

"If we are to curtail the source and spread of the preventable diseases, a better effort must be put forth to stress the importance of immunizing children early in life. If we are to curtail the primary source and spread of these diseases—in the school age children—we must be certain that all children are properly immunized against the diseases prescribed by the Compulsory Immunization Law. This must be a joint effort by the parents, private physicians, county school system and local health departments," Doctor Dyer concluded.

In the left photo above, Dr. Claude E. Welch, Boston surgeon, congratulates Mrs. C. A. (Carl) Hoffman of Huntington after Mrs. Hoffman's husband won election as the American Medical Association's President Elect at the AMA's annual meeting in Atlantic City, New Jersey, in June. Doctor Hoffman looks on from the background as a gracious Doctor Welch, the only other President Elect candidate, visits the West Virginia suite at Convention headquarters. At the right, enjoying the annual breakfast sponsored by the Aces and Deuces organization during the AMA meeting, are Mrs. Kenneth G. MacDonald of Charleston, wife of the West Virginia State Medical Association's Treasurer; Dr. Richard W. Corbitt of Parkersburg; Dr. Harry S. Weeks, Jr., of Wheeling, installed in August as the State Medical Association's President, and Dr. Stephen D. Ward of Wheeling.

Positive Legislative Record Cited by AMA Report

The American Medical Association has set forth its recent record on legislation—a record that shows statements in support of health care proposals in 31 of 35 appearances in the 91st Congress, and support in the present Congress for medical school expansion; increased financial aid to medical students; family practice training programs, and full funding for maternal and child care programs.

"It requires a certain strain on the process of human logic to interpret this record as negative," the AMA noted.

The AMA's record on legislation was submitted as part of a 39-page statement filed by the organization with the Subcommittee on Administrative Practice and Procedure of the Senate Judiciary Committee. Subcommittee Chairman Sen. Edward M. Kennedy, Massachusetts Democrat, had charged the AMA with maintaining a negative and obstructionist attitude toward proposals to improve health care in the United States during a hearing by the Subcommittee on July 14.

Bills supported by the AMA in the 91st Congress included appropriations for hospital and medical facilities construction; appropriations for medical education; drug abuse education and narcotic addict rehabilitation; vaccination assistance programs, and regional medical programs.

The AMA opposed as unnecessary the proposed Commission on Marihuana; opposed one version of the Occupational Safety and Health Act of 1969 but supported another version in both the Senate and House; and opposed certain parts of the Social Security Amendments of 1970 while supporting other parts of the bill.

This affirmative legislative stance has been maintained in the present Congress, as many members of the Senate and House—from both sides of the aisle will attest, the AMA noted.

The AMA, in its testimony, pointed out that it has introduced its own proposal for financing health care—Medicredit—which would provide government subsidized health insurance to the poor and insure against catastrophic medical costs.

"Medicredit is designed to end for all Americans the burden of expense, and to make all Americans truly equal in their access to all types of medical care," the AMA said.

The organization warned against the "panacea" approach of a massive government health program as recommended by Senator Kennedy.

The AMA did object to Medicare at the time of its passage because it believed available government funds should not be used to provide assistance to those who did not need it and because of the unsound actuarial basis on which it was predicted. Premiums have since had to be raised several times to support the program, the AMA noted.

After Medicare became law, both the AMA and doctors generally gave it full support and worked to make the program a success, the report added.

Medical Meetings

The following is a partial list of national, state and district medical meetings scheduled in the coming months.

1971

Sept. 9-11—Am. Assn. of Ob.-Gyn., Hot Springs, Va.
Sept. 13-17—Int. Conf. on Coal Workers Pneumoconiosis, New York City.
Sept. 17-18—W. Va. Heart Assn., Clarksburg.
Sept. 20-24—Am. Acad. of Oph. and Otol., Las Vegas.
Sept. 21-23—Ky. Medical, Louisville.
Sept. 23—Rural Health Conference, Jackson's Mill.
Sept. 23-25—Central Assn., Ob.-Gyn., White Sulphur Springs.
Oct. 1-8—AAGP, Miami Beach.
Oct. 11-14—Ind. Medical, Indianapolis.
Oct. 14-17—Va. Medical, Arlington.
Oct. 16-21—Am. Acad. of Ped., Chicago.
Oct. 16-20—Am. Soc. of Anes., Atlanta.
Oct. 18-22—ACS, Atlantic City.
Oct. 24-28—Am. Col. of Chest Phys., Philadelphia.
Oct. 31-Nov. 4—Sou. Med. Assn., Miami Beach.
Nov. 3-6—Am. Soc. of Cyt., Washington.
Nov. 8-11—Pa. Medical, Lancaster.
Nov. 9-16—Am. Heart Assn., Anaheim, Calif.
Nov. 28-Dec. 1—AMA Clinical, New Orleans.
Dec. 4-9—Am. Acad. of Derm., Chicago.
Dec. 5-7—Am. Society of Hema., San Francisco.
Dec. 6-8—Sou. Surg. Assn., Hot Springs, Va.

1972

Jan. 24-26—Soc. of Thoracic Surg., San Francisco.
Jan. 30—5th Mid-Winter Conf. on Chest Diseases, Charleston.
Feb. 4-12—Am. Soc. of Clin. Path. & Col. of Am. Path., Atlanta.
Feb. 5-6—AMA Cong. on Med. Educ., Chicago.
March 1-5—Am. Col. of Cardiology, Chicago.
March 2-4—Central Surg. Assn., Chicago.
March 6-7—Int. Acad. of Path., Chicago.
March 27-30—Southeastern Surg. Cong., Washington.
April 3-8—Am. Col. of Rad., Bal Harbour, Fla.
April 13-18—Am. Derm. Assn., Dorado Beach, P. R.
April 16-20—Am. Assn. of Neu. Surg., Boston.
April 16-21—ACP, Atlantic City.
April 17-20—Am. Col. of Ob. & Gyn., Chicago.
April 21-23—W. Va. Chapter, AAGP, Charleston.
April 24-29—Am. Acad. of Neurology, St. Louis.
April 26-29—Am. Ped. Soc., Atlantic City.
April 26-29—W. Va. Acad. of Oph. and Otol., White Sulphur Springs.
May 1-3—Am. Assn. for Thoracic Surgery, Los Angeles.
May 1-5—Am. Psy. Assn., Washington.
May 3-5—Maryland Medical, Baltimore.
May 3-6—W. Va. Chap., ACS, White Sulphur Springs.
May 6—Am. Col. of Psy., Dallas.
May 8-12—Ohio Medical, Cincinnati.
May 18-20—Am. Gyn. Soc., Hot Springs, Va.
May 21-24—Am. Thoracic Soc., Kansas City.
May 22-25—Am. Urol. Assn., Washington.
June 8-14—Am. Rheumatism Assn., Dallas.
June 18-22—AMA, San Francisco.
June 24-25—Am. Diabetes Assn., San Francisco.
July 5-10—Int. Col. of Surg., Lake George, N. Y.
Aug. 7-10—Am. Hosp. Assn., Chicago.
Aug. 24-26—105th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.
Sept. 7-9—Am. Assn. of Ob.-Gyn., Hot Springs, Va.
Sept. 9—Ky. Medical, Louisville.

The West Virginia Medical Journal

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Presidential Address*

George R. Callender, Jr., M. D.

First of all, I wish to pay tribute to my wife, who has been a source of continuous encouragement and invaluable assistance throughout this year. At the AMA Clinical Meeting in Boston and at the Annual Convention in Atlantic City, she managed the hospitality suite with grace and expertise. That was no meager task during this, the year in which Carl Hoffman won election as President Elect of the American Medical Association. May I introduce my lovely wife, Helen, and my son, David.

As President, I recognize, as have all Presidents who have preceded me, the invaluable assistance and direction needed and received from our Executive Secretary, William Lively. Our Executive Assistant, Charles Lewis, has been of tremendous value and has shown great talent since joining the West Virginia State Medical Association. I have, indeed, enjoyed my association with both of them and their most valuable assistants, Mary Hamilton and Sue Shanklin.

Next, I would like to thank all the orthopedic surgeons of Charleston who allowed me to limit my practice to purely elective work. My particular thanks go to Dr. Elwood H. Heilman and Dr. Henry M. Hills, who covered my patients during my frequent absences from Charleston.

Being President during the year of Carl Hoffman's election has certainly added to the interest and to the work, as well as to the pleasure, of this position. *Almost everyone* helped in one way or another during this crucial year to insure Doctor Hoffman's election. Many letters were sent, and many phone calls were made, to AMA Delegates in his behalf. For this reason, it was decided in Atlantic City by the Campaign Committee—headed by Dr. Frank J. Holroyd and Dr. Richard E. Flood—to run a low-key campaign and a hospitality suite of simple warmth and dignity. This could not have been accomplished without the help of *many* sincerely dedicated individuals and families from the State of West Virginia.

The Author

- **George R. Callender, Jr., M. D., Immediate Past President, West Virginia State Medical Association.**

During the exciting activities of this year, the work of the Association continued. Each committee chairman deserves our special thanks for the work he did for *all* of us. Many of the chairmen's reports have been published in *The Journal* for your edification. I will mention some of these activities, because of their particular importance at this time.

Nursing

Dr. Richard E. Flood, Chairman of the Nurses Liaison Committee, has made great strides in developing a closer relationship with representatives of the nursing profession. This relationship must be exceedingly close, both on the State and National levels, if the two professions are to work together to provide quality medical care.

Your Committee on Medical Education and Hospitals, under the chairmanship of Dr. Pat A. Tuckwiller, has had another active year. The Committee and the State Medical Association were among sponsors of the Fourth Mid-Winter Conference on Chest Disease last January—a program which took the form of a Symposium on Air Pollution. For the first time, a Saturday afternoon program for the general public was arranged at Morris Harvey College as a part of the

*Presented at the second and final session of the House of Delegates, 104th Annual Meeting of the West Virginia State Medical Association, The Greenbrier, White Sulphur Springs, W. Va., Saturday, August 21, 1971.

Conference, and the papers presented on how air pollutants, and meteorological conditions, affect the general health were published. In April, the Committee on Medical Education and Hospitals sponsored a Second Statewide Planning Conference on Medical Education that brought forth a substantial number of recommendations which are receiving further study both by the Committee and the Council.

Also, this past year has seen the actual launching of the Voluntary Office Self-Audit Service, an educational project strongly supported by the Committee on Medical Education and the Council. This service is a joint undertaking of the Medical Association and the West Virginia Regional Medical Program, with Dr. Daniel Hamaty of Charleston, Vice Chairman of the Committee on Medical Education and Hospitals, serving as Director of Field Operations. The initial response and participation from individual physicians brought into personal contact with the project has been generally positive as we all continue to work toward the goal of higher quality and more effective patient care in our offices.

It was my pleasure to attend the 23rd Annual Rural Health Conference at Jackson's Mill last fall. In my opinion, this is one of the most successful and rewarding conferences sponsored by the State Medical Association. I am sure the more than 300 persons gathered at the Mill would agree. Dr. Martha J. Coyner and the Rural Health Committee deserve praise for bringing together each year leaders of the medical profession, state and county health departments, farm organizations and home demonstration councils.

Liaison With WVU Students

During this year, there has developed, I believe, a much closer relationship between the West Virginia University Medical Center faculty and students, and the physicians of West Virginia, primarily due to the efforts of Dr. Maynard P. Pride, Dean Frank W. McKee and the late Dr. E. F. Heiskell. Dean McKee's great interest is demonstrated by his participation in Liaison Committee meetings, and our Statewide Medical Education Planning Conference; attendance at county medical society meetings, and on Thursday at this Convention's Open Forum.

With the advice and counsel of Doctor Pride, we have continued to support the activities of the Student Medical Association of the University. This year, we contributed $700 toward expenses for attendance at Student Medical Association, American Medical Association and other meetings.

Auxiliary—Interest of the Student

At this time we must point with great pride to the Woman's Auxiliary to the West Virginia State Medical Association and its most attractive and very gracious President, Mrs. Robert J. Tchou. The Auxiliary's continued community activities are a most powerful public relations force for American Medicine; and its constant effort in raising funds for AMA-ERF shows the public and the physicians of this State the keen desire of Auxiliary members to increase available health manpower for the good of all people in the United States.

This year, the Auxiliary collected $10,585.86, which was earmarked for donation to the West Virginia University School of Medicine. As a result of this effort, our Auxiliary received the honor of being named runner-up for the largest contribution per capita in its Eastern Region. With the addition of the West Virginia share of undesignated contributions, there was presented to Doctor McKee at the first session of the House of Delegates a check for $13,305.47 to support medical education in West Virginia.

Program

Again, we all have profited from the excellent medical education program prepared by Dean Sleeth and his Committee. They are to be congratulated. They were kind enough to allow a couple of hours for an innovation this year, the Open Forum, which provided time for the individual practitioner to voice his opinion, and suggest solutions to political, economic, legal and educational problems facing us in West Virginia today. This discussion period was recorded, in order to permit study of all opinions and suggestions. It is hoped that this material will be a guide to the officers of this organization in their work on behalf of *all* physicians at the state, national and local level.

AMA

Let me speak briefly about our participation in the activities of the AMA. The AMA's activities reflect the desires of the individual physician. If the individual physician does not have an input into the discussion and negotiation, it does not represent him. The main source of input is through the introduction of resolutions to the House of Delegates at annual and clinical AMA sessions. The support of these resolutions, and discussion of other resolutions before the reference committees to which they are assigned, and the final vote pro or con provided by your Delegates, is our method of control in actions of the AMA.

Here in West Virginia, the source of any resolution presented by our delegation to the AMA

House of Delegates may be from any individual physician member; a group of physicians, such as a specialty section, or it may be initiated by the Council. Physicians on the Council are elected by *you* to represent *you*, not just themselves. Therefore, the House of Delegates must be extremely careful in the election of councilmen, being sure they, in truth, represent your collective interest.

This same truth of representation must be in each member of your delegation to the AMA, particularly the Delegates and Alternate Delegates. They should be elected—not as an honor that you bestow upon them, although it is a great honor—but because they will work for your benefit, whether it be in supporting your resolution before a reference committee, or before the House of Delegates. I must hasten to state that your Delegates, Drs. Holroyd and Flood, and Alternate Delegates, Drs. Reed and Esposito, have served you well.

In order to have representation from West Virginia before the reference committees, there should be an eight-member delegation to AMA meetings. With doubling up on minor reference committees, a seven-member delegation could cover the meetings. Prior to August, 1970, you authorized financial support to the two annual AMA conventions for the two Delegates, the President and the President Elect. Last year, you approved support for the Vice President. In order to insure a sufficient number in the delegation, the Alternate Delegates should receive your financial support. This financial support is indeed small compared to the financial loss resulting from a sacrifice of practice time during the five to six days spent at these meetings on behalf of *all* of the members of the West Virginia State Medical Association.

Legislation

This year in the State Legislature, there was presented a tremendous number of bills affecting the provision of medical care in West Virginia. As rapidly as these bills were made available, they were reviewed by the members of the Legislative Committee and a decision to support, not to support or to remain neutral was made. These decisions then were transmitted to members of the Senate and House, particularly to our physician members, Drs. David Wallace and Milton Lilly.

Many times, in the heat of legislative action, full Committee opinion could not be obtained and the Chairman of the Legislative Committee; our legislators and members of the Executive Committee; our administrative staff, and Mr. William E. Mohler, our legal and legislative consultant, made necessary decisions felt to be in the best interest of the medical profession and the people of West Virginia. We felt it was a very good year. My personal thanks to you, Doctor Holroyd, and your Committee, for the tremendous job done during the past Legislature.

There are, however, some legislative decisions not to our liking. Certainly, we would have preferred to have seen passed the initial physician's assistant bill without the section relating to the specialty of ophthalmology. Certainly, also, the failure to pass a comprehensive mental health bill postpones again the upgrading of treatment of the mentally ill in this state.

The State Medical Association must become *more active* in the preparation, presentation and public support of bills to remove obstructions to the private practice of quality medicine—to improve the medical economics climate in order to encourage the influx of new physicians—to make quality medical care available to all, the indigent and medically indigent as well as the affluent—and to remove the unnecessary threat of unjustifiable professional liability actions which force unnecessary expense in the provision of medical care; and tends to destroy the great personal pleasure for the physician in the use of his talents for the benefit of all mankind.

WESPAC and AMPAC

It takes more than the efforts of the Legislative Committee, executive secretaries and Mr. Mohler to successfully affect legislation. It takes organized political action to obtain individual legislators' support. This is the aim and purpose of WESPAC and AMPAC. Your WESPAC Board, under the direction of Dr. Frank J. Holroyd and the Secretary-Treasurer, Mrs. Pat A. Tuckwiller, did an excellent job of distributing these funds. More funds are needed.

The use of financial support during political campaigns is most effective. Here, money really talks. Talking with individual legislators and explaining the views of medicine are even more important. Perhaps increased activity by a paid lobbyist would facilitate medical legislation, but a more individualized campaign by individual physicians, I believe, would be even more effective.

A specific listing of legislators, with the name of the personal friend and/or physician who could readily discuss medicine's position, might provide at least a more organized approach—with such a list readily available to all physicians prior to and during each legislative session. A brief statement of each legislator's—or aspiring

legislator's—attitude towards medicine, and perhaps his specific allegiance, would certainly assist us in planning our approach, and in attempting to obtain legislators' help. This also would make each of us a more informed voter in State and National elections.

Medical Economics

In medical economics, we still have agents who do not accept the principle of usual, customary or reasonable bases for physicians' charges, thus continuing the archaic principle of the sick who are able to pay for medical care subsidizing the care of the poor. One agency has restricted the free choice of physicians, and even feels it has a right to determine the need of certain specialists in the community. This type of infringement on the private practice of medicine shows still another threat of third-party control.

Under programs operated by the State Department of Welfare, payments to physicians amounted to about $5 million in the fiscal year which ended June 30. With simple mathematics, the more important fact is that the 1,400 physicians in West Virginia are, therefore, in effect, making their private patients subsidize the care of the poor to the tune of more than $1.5 million. With the present method of determining maximum fees under Medicare—we *must* continue our charges on the basis of UCR. Continuing to charge on the basis of *expected* amounts received will lock in our reimbursement, and thus not permit any increase as inflation occurs.

If we must be forced to accept substandard fees for our services, let us at least provide a correct profile of UCR on which to base these reimbursements. Each charge submitted to the agencies that is less than UCR hurts each physician caring for these patients, and also hurts the medical economy of West Virginia.

With the fine work of Dr. Jimmie L. Mangus in the Department of Welfare and Dr. Kenneth G. MacDonald in the Workmen's Compensation Fund, and our Joint Conference Committee in Welfare and Compensation, relationships with these agencies remain quite good. There must, however, be continued dialogue in order to retain this compatibility. It was with remorse that we learned of the resignation of Fred Davis, Jr., as Compensation Commissioner. We believe that Governor Moore has appointed, as a successor to Mr. Davis, a Commissioner with the same exceptional qualifications and capabilities, in his choice of Edgar F. Heiskell, III, of Morgantown.

Vocational Rehabilitation

Dr. Buford W. McNeer has continued to meet and work with the Division of Vocational Rehabilitation. There remain many problems of physician relationship with DVR. Director Thorold Funk of that Division has shown a desire and willingness to try to work out these problems. Progress is being made in the area of fees for service, with Doctor MacDonald available to provide the DVR with his experience in maintaining a schedule of maximum allowances for the Workmen's Compensation Fund.

I wish to thank you personally, Doctor McNeer, for your efforts in working towards an understanding between DVR and physicians of this State for the benefit of all physically handicapped persons in need of our services.

A recent meeting was held with representatives of Blue Shield in Parkersburg, intermediary for the CHAMPUS Program, in order to discuss our mutual problems. Mr. Harold N. Wilson, Blue Shield President, said the number of disputed claims was extremely small, a fraction of one per cent of charges. Despite the appearance of no recourse in the signing of claims forms, county and state review mechanisms have been, and will continue to be, used in adjudication of claims. Billing must continue on the UCR basis. The CHAMPUS schedule of maximum allowance is based on the 90th percentile of UCR initially established by a compilation of maximum benefit policies of Blue Shield throughout West Virginia. A more compatible relationship appears to be in the offing.

The Medicare, Part A, intermediary—Blue Cross-Blue Shield of Charleston—also was represented at the meeting by Mr. C. Judson Pearson, the Director; Mr. A. Dudley Rumbaugh; Mrs. Belinda Byus, and Mrs. Velma Payne. The entire mechanism of claims review was reviewed and openly discussed. Another meeting was held a few days later by your President and these representatives.

Of interest to you will be the agreement to revise the letter to physicians requesting further information with regard to the need for continued facility confinement prior to further consideration of payment of facility charges as a financial benefit for the aged patient.

It was agreed jointly that there must be continued discussion of the problems created by rules and regulations of the Social Security Administration; and there must be further physician—as well as public—education in the problems of administration of the law by the intermediary, as well as in the problems of rendering quality medical care to the aged under these restrictions. These educational activities may help to avoid retroactive denial in payment of benefits, and the subsequent financial loss. Despite all efforts to avoid these retroactive denials of payments, they will continue to exist—for the present restrictive

regulations of the Social Security Administration do not provide financial support for what most physicians consider quality medical care.

The affluent aged are able to cover the cost differential without financial stress, but for the less fortunate, the losses can create significant financial stress. There is no way at present that the aged can fully insure themselves against these losses through hospitalization insurance. No such policies now exist. They can only obtain co-insurance to cover the indemnity portion.

For those aged who cannot pay these charges, the hospital cannot, therefore, recover these losses except in adjusting their billed charges to those sick able to pay. Again, those sick that are able to pay are paying for the sick poor. We, therefore, must face the cold facts that Medicare has created a "*crisis in health care of the aged.*" Yet, this Social Security form of medical care that now exists only for the aged is being proposed by some as a panacea for health care for all.

There is a great need to educate the public, not only in order that they be prepared for restrictions in facility care provided by Social Security regulations, but also to provide them with the knowledge of appeal to the Social Security Administration in event of ultimate denial of coverage. Further, there is a need for public education in the problems of rendering quality medical care under these restrictions, so that our citizens can discuss needed changes in rules and regulations with their lawmakers in Washington. Needed changes can only be affected by legislative action in the form of revision of Social Security Act provisions relating to Medicare facility coverage.

This point leads me to recommend the establishment and funding of a Public Education Committee to provide the public with information on the problems of providing quality medical care to the people of West Virginia. We have available for this purpose an excellent, literary resource in the Editorial Staff of *The West Virginia Medical Journal.* If you have not read the editorials during this past year, particularly, you have missed a great deal.

Conclusion

I now come to the end of my term as President of the West Virginia State Medical Association. During this year, I have heard pessimistic and fatalistic statements that we inevitably are going to be consumed by a form of national health service—and, therefore, why fight! Further, some physicians look down on those of us who are spending our time and money to fight this battle to preserve the present form of American Medicine which has given this nation's people the highest quality of medical care in the world.

I am sick of these criticizing, do-nothing physicians who—with this defeatist attitude—could never win a battle, much less a war, against the frontal attack of the Federal socialists in our government, the advocators of a national health service.

Recent statements by President Nixon are encouraging. The faltering of Medicare gives us ammunition against socialized medicine. The advent of the types of proposed national health insurance, such as the AMA's Medicredit Program, and, the development of the foundation movement, give us a positive approach to the improvement of health care for all, including the poor and the near-poor. With unity, not division —with solidarity of effort, not fragmentation—with optimistic attack, not pessimistic inaction—we can win and secure the present; and further improve the quality of medical care to all people of this State.

Mediastinal Liposarcoma

Joseph R. Lancaster, M. D., and Robert J. Gardner, M. D.

MEDIASTINAL liposarcoma is an extremely rare tumor Only 36 cases have been reported to date.[1, 2, 3, 4, 5] In those cases that have been treated surgically, long-term follow-up reports usually have been lacking. In a report from the Mayo Clinic[3], of eight patients, seven were resected. Four patients then expired with tumor; one was living with nonresectable recurrent neoplasm; one was alive without evidence of tumor at nineteen months, and one had just had re-resection of a recurrence twenty years after the original operation.

The purpose of this paper is to present a late recurrence in a case previously reported by Currie[5], in 1964.

The Authors

- **Joseph R. Lancaster, M. D., and Robert J. Gardner, M. D., Department of Surgery, West Virginia University School of Medicine, Morgantown.**

Case Report

A 49-year-old white college professor was admitted to the West Virginia University Medical Center on October 12, 1962. The complaints at the time of admission were weakness and easy fatigability of four months' duration. He also had an early morning cough of one month's duration. A chest x-ray (Figure 1) was interpreted as showing a large mass in the lower portion of the left hemithorax confluent with the cardiac silhouette and associated with atelectasis in adjacent portions of the left lung. On October 22, 1962, the patient was explored through a posterolateral thoracotomy. A large lobulated and well encapsulated mediastinal tumor was found filling the whole lower portion of the left pleural space. Its vascular attachment lay in the anterior mediastinum above and anterior to the root of the aorta, in the region of the inferior aspect of the thymus. As best determined at the operating table, complete removal of the tumor was accomplished. The resected tumor weighed 2400 Gm. Histologically, the tumor was composed largely of fat cells of varying degrees of maturity. Intracellular substance was abundant throughout and was often faintly bluish and myxoid in appearance (Figure 2). A diagnosis of myxoid liposarcoma was made.

The patient did well postoperatively and was followed at regular intervals in the clinic. Eight years later, a routine chest x-ray showed evidence of recurrence (Figure 3). He was readmitted to West Virginia University Medical Center on October 10, 1970. Except for the abnormal chest x-ray, no other evidence of tumor spread was found. On October 13, 1970, he was explored through a median sternotomy. An encapsulated noninvasive anterior mediastinal tumor weighing 200 Gm. was found lying on the anterior surface of the pericardium and extending up to the right innominate vein. There was a large venous connection from the tumor to the right innominate vein. Again, the tumor was completely excised without difficulty. Histologically, the fat cells

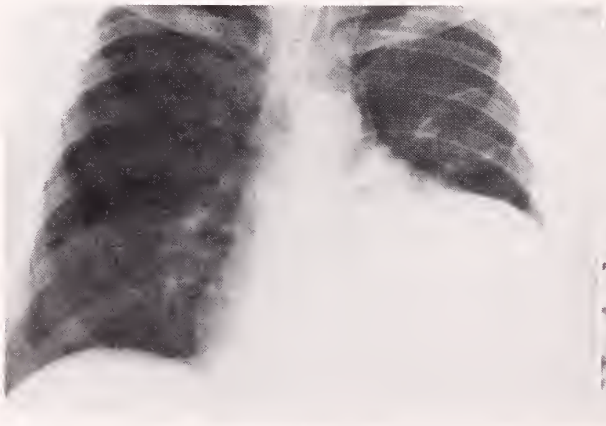

Figure 1. Initial preoperative chest roentgenogram.

Figure 2. Representative sample of original tumor showing immature fat cells scattered in a myxoid intracellular substance.

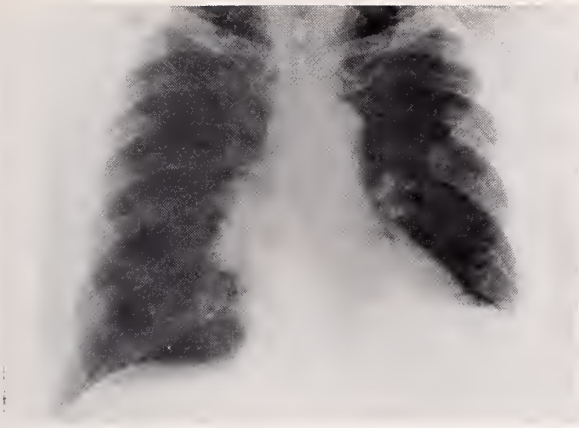

Figure 3. Chest roentgenogram showing recurrent anterior mediastinal mass presenting primarily toward the right hilar area.

Figure 4. Representative sample of the recurrent tumor showing mature fat cells arranged in an orderly manner.

comprising the tumor were almost entirely normal except for focal areas of nuclear enlargement and hyperchromatism of fat cell nuclei. The tumor did not show any of the myxoid characteristics seen in the original specimen (Figures 4 and 5). A diagnosis of well differentiated liposarcoma was made. The patient has done well and is being followed at regular intervals. Postoperative radiation therapy was not utilized.

Discussion

The management of liposarcoma of the mediastinum is fundamentally wide excision. The use of routine postoperative irradiation remains controversial. Edland[6] feels because of high incidence of local recurrence after seemingly complete excision routine postoperative irradiation should be done. Pack and Ariel[7] point out that liposarcomas are radiosensitive but few are radiocurable. These tumors rarely metastasize widely but, as in our case, local late recurrence is common, which makes close, long-term follow-up mandatory.

Figure 5. Higher power view of recurrent tumor showing an area of nuclear enlargement and hyperchromatism of fat cell nuclei.

References

1. Amador, E. & Danzig, L. S.: Liposarcoma of the Mediastinum, Dis. Chest 41:1, 1962.
2. Uner, R., Balim, A. I. & Oktem, K.: Mediastinal Liposarcoma, Dis. Chest 43:1, 1963.
3. Cicciarelli, F. E., Soule, E. H. & McGoon, D. C.: Lipoma and Liposarcoma of the Mediastinum, J. Thorac. & Cardiov. Surg. 47:411, 1964.
4. Wilson, J. R. & Bartley, T. D.: Liposarcoma of the Mediastinum. Report of a Case in a Child and Review of the Literature, J. Thorac. & Cardiov. Surg. 48:486, 1964.
5. Currie, R. A.: Mediastinal Liposarcoma, Dis. Chest 46:489, 1964.
6. Edland, R. W.: Liposarcoma. A Retrospective Study of Fifteen Cases, a Review of the Literature and a Discussion of Radiosensitivity, Amer. J. Roentgenol. 103:778, 1968.
7. Pack, G. T. & Ariel, I. M.: Tumors of the Soft Somatic Tissues. A Clinical Treatise. New York, Hoeber Medical Division, Harper and Row Publishers, 1958, pp. 365-383.

Endocarditis—Clinical Findings and Management*

Francis X. Worthington, Jr., M. D., and N. Joel Ehrenkranz, M. D.

The basic lesion of endocarditis is a friable, verrucous three-layered vegetation. The inner and thickest layer consists of fibrin, collagen and necrotic blood elements, the middle layer is made up of bacteria, and the outer layer of bacteria and loose fibrin strands. Most cases of endocarditis are due to bacteria, but fungi and rickettsiae may be responsible.

Sterile endocarditis may persist after successful treatment of infected heart valves and result in emboli. In addition, malignant disease, pulmonary emboli, pneumonia and systemic lupus erythematosus can be associated with sterile endocarditis. Emboli are at least as frequent in sterile as in bacterial endocarditis.

Prior to the availability of antibiotics, when mortality was virtually 100%, a clinical separation between acute and sub-acute endocarditis was made on the basis of duration of survival. This has little merit today, although, on occasion, fulminating endocarditis is still seen with *Staphylococcus aureus* or pneumococcal infection. For practical purposes, however, all cases of endocarditis should be considered as potentially life-threatening.

Rheumatic heart disease is still the most common underlying predisposing condition. Since the mitral valve is the most commonly affected in rheumatic fever, it is most commonly involved in bacterial endocarditis; next are aortic, tricuspid and pulmonic valves in decreasing order.

Among congenital abnormalities, ventricular septal defects are the most commonly infected, then tetralogy of Fallot, patent ductus arteriosis, pulmonary, and aortic stenosis may be listed. Endocarditis may complicate coarctation and aneurysm of the aorta, arteriovenous fistulae, syphilitic heart disease, and bicuspid aortic valves. Thrombi formed by a jet of blood streaming from a high to a low pressure area can become infected. Such a jet does not occur in inter-atrial septal defects, nor does endocarditis.

Endocarditis may occur on normal heart valves in elderly persons, and in persons infected with *S. aureus*, pneumococci, meningococci, or brucellae.

* Prepared by the West Virginia Heart Association for *The Journal.*

The Authors

- **Francis X. Worthington, Jr., M. D., and N. Joel Ehrenkranz, M. D., University of Miami School of Medicine, Miami, Florida.**

Bacteremia is generally a necessary condition to establish endocarditis, and may result from dental extractions or cleaning of teeth, respiratory infections, pyoderma, prostatic massage, cystoscopy, urinary and cardiac catheterization, normal obstetic delivery, prolonged intravenous usage, or self-administration of drugs by the intravenous route—a current social problem. As a complication of cardiac surgery, infection introduced at the time of operation may lead to endocarditis.

When antibiotics were first introduced, the bacterial causes of endocarditis were: streptococci 62 per cent, pneumococci 15 per cent, staphylococci 13 per cent, gonococci 7 per cent, miscellaneous and multiple organisms 3 per cent. Over the past two decades there has been a marked reduction in the occurrence of endocarditis due to gonococci and pneumococci and an increase in cases due to staphylococci, group D streptococci or negative blood cultures. The latter may represent instances of sterile endocarditis, or infections caused by organisms such as bacteroides, listeria or microaerophilic streptococci which require specialized cultivation.

The changes in organisms are attributed to antibiotic usage, long term hospitalization, aging patient populations and aggressive surgical manipulation.

Clinical Manifestations

Textbook descriptions include fever, heart murmur, splenomegaly, anemia and some manifestations of peripheral embolization. The majority of patients do not manifest the clear cut picture. A recent series revealed that 75 per cent of patients with endocarditis had no evidence of peripheral embolization, 60 per cent had no eplenomegaly and 4 per cent had no heart murmur.

Murmurs of endocarditis are generally insufficiency murmurs. Flow murmurs in patients with fever and enemia are often considered as evidence for endocarditis, but frequently these

findings merely represent a hyperdynamic circulation. Rapidly changing murmurs are rarely evidence of endocarditis unless there has been rupture of chordae tendinae or papillary muscles, or heart failure. Changes in cardiac function alone characteristically produce changing cardiac murmurs. An infrequent cause of change in cardiac function is endocarditis. However, sudden onset of myocardial infarction or congestive heart failure in patient with previous compensated congenital or rheumatic heart disease may be the presenting finding.

Fever, the most common physical finding, may be absent for a variety of reasons including aspirin, shock, advanced age, antibiotic treatment, uremic, steroid treatment, or severe infection.

Endocarditis may present as an acute fulminating illness in which meningitis, intracerebral hemorrhage, congestive heart failure, cardiac arrhythmia or uremia are prominent, and the underlying cause is overlooked. Neurologic manifestations are particularly common in the elderly, and in patients with cyanotic congenital heart disease. In such persons signs of brain abscess, toxic psychosis or meningitis may be the initial event. On occasion, peripheral embolization may be a presenting form with such manifestations as infarction of fingers, toes, nose or ear lobes. Embolization of larger blood vessels suggests fungal or S. *aureus* endocarditis; a common site of infarction is the spleen. Splenomegaly is often absent at the onset, although patients may complain of a left upper quardrant abdominal pain. Both renal embolization and glomerulitis—the latter probably autoimmune in origin—are common in cases untreated for some time. Hematuria, proteinuria and azotemia resulting from this type of involvement may lead to an initial diagnosis of glomerulonephritis or renal failure. The anemia is non-specific and is present in approximately two thirds of the cases. It is usually normochromic, normocytic and may be associated with monocytosis.

Treatment

Antibiotics either singly or in combination should be chosen for bactericidal activity against the infecting organisms. Ideally, the antibiotic should have a sufficiently low order of toxicity to permit an appropriate duration of treatment. We feel that the minimal time is three weeks. Some authors have presented good treatment results of S. *viridans* endocarditis with large doses of penicillin and streptomycin in two weeks. Tube dilutions to determine bactericidal endpoint of antibiotics on the patient's organism, and the bactericidal effects of his serum upon his organism, are helpful in guiding therapy. A bactericidal blood level, five times greater than the minimal *in vitro* bactericidal level, is generally sought.

When blood cultures are negative or when treatment was started before appropriate cultures have been obtained, treatment may be carried out with large doses of penicillin (12 to 20 million units a day) and streptomycin (250 mg.q.6.h.) for at least four weeks.

Antibiotic therapy will not improve the damaged valve, and distortion of valve function may follow healing and scarring; surgical correction may ultimately be needed. In cases of severe valvular disease and cardiac decompensation, valvuloplasty may be required. Cardiac surgery in the face of infection may be necessary. This should not be undertaken lightly, but may be the only recourse if infection is uncontrolled or heart failure due to valve damage is not controllable by medical therapy.

Restoring Youth to Bones

There is an old saying among orthopedic physicians that if two bone ends of a young child are left in the same room they will heal. This is not the case with older people, unfortunately, but medical researchers at Johns Hopkins University School of Medicine report a new substance which may make old bones heal like young ones.

A series of successful experiments with a substance called Calcitonin in bones of laboratory puppies and older dogs has led to consideration of further investigating the substance in actual clinical trials at the University. The National Society for Medical Research in Washington attested to the great contribution the research project could make to mankind, should equally successful results be found with human patients.

Electrocardiogram of the Month

Q-T Prolongation Associated With the Use of Thioridazine Hydrochloride (Mellaril)

Vicken V. Kalbian, M. D.

THE electrocardiographic finding of a prolonged Q-T interval usually denotes a serious electrolyte disturbance, most commonly hypocalcemia. Less frequently it is seen in certain patients with central nervous system disease and following the administration of quinidine and the phenothiazine group of drugs. This report demonstrates Q-T prolongation associated with the use of thioridazine hydrochloride (Mellaril).

The Author

- **Vicken V. Kalbian, M. D., Assistant Chief, Medical Service, Veterans Administration Center, Martinsburg.**

Case History

A 50-year-old white male with schizophrenia had been taking Mellaril in a dose of 200 mg. three times a day for several months. Physical examination revealed no abnormal findings. Biochemical studies on the blood were within normal limits. Serum K + was 4.2 mEq/liter. Ca++ was 9.5 mgm%. Radioisotope studies revealed a euthyroid state. The electrocardiogram showed an abnormal upward slope of S-T segment, with a broad, blunted, double-humped T wave (Figure 1). The Q-T interval was 0.54 second (R-R interval of 0.96 second). Therefore, a corrected Q-T interval of 0.56 second was calculated by using a standard formula (upper limit of normal is 0.413 second).[1]

Comments

The Q-T interval represents a summation of ventricular depolarization and repolarization. The interval between the first and second heart sounds denotes the length of mechanical systole, whereas the Q-T interval represents electrical systole.[2] Under normal circumstances these intervals coincide, and the first component of the second sound (A_2) falls within 0.04 seconds of the end of the T wave. However, with delayed ventricular repolarization, A_2 will fall before the

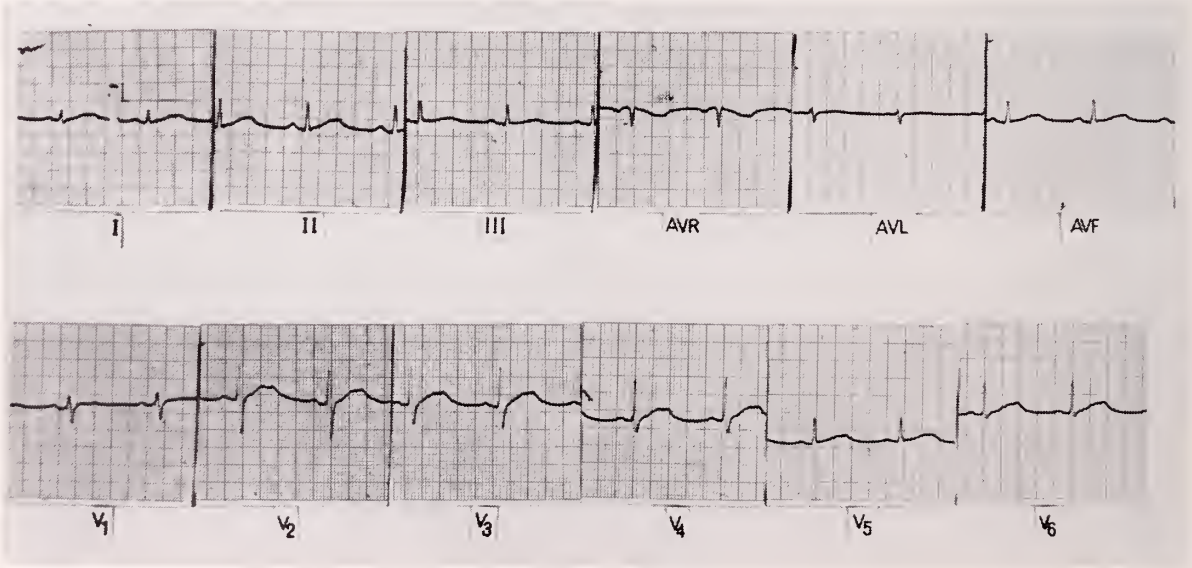

Figure 1. Routine electrocardiogram.

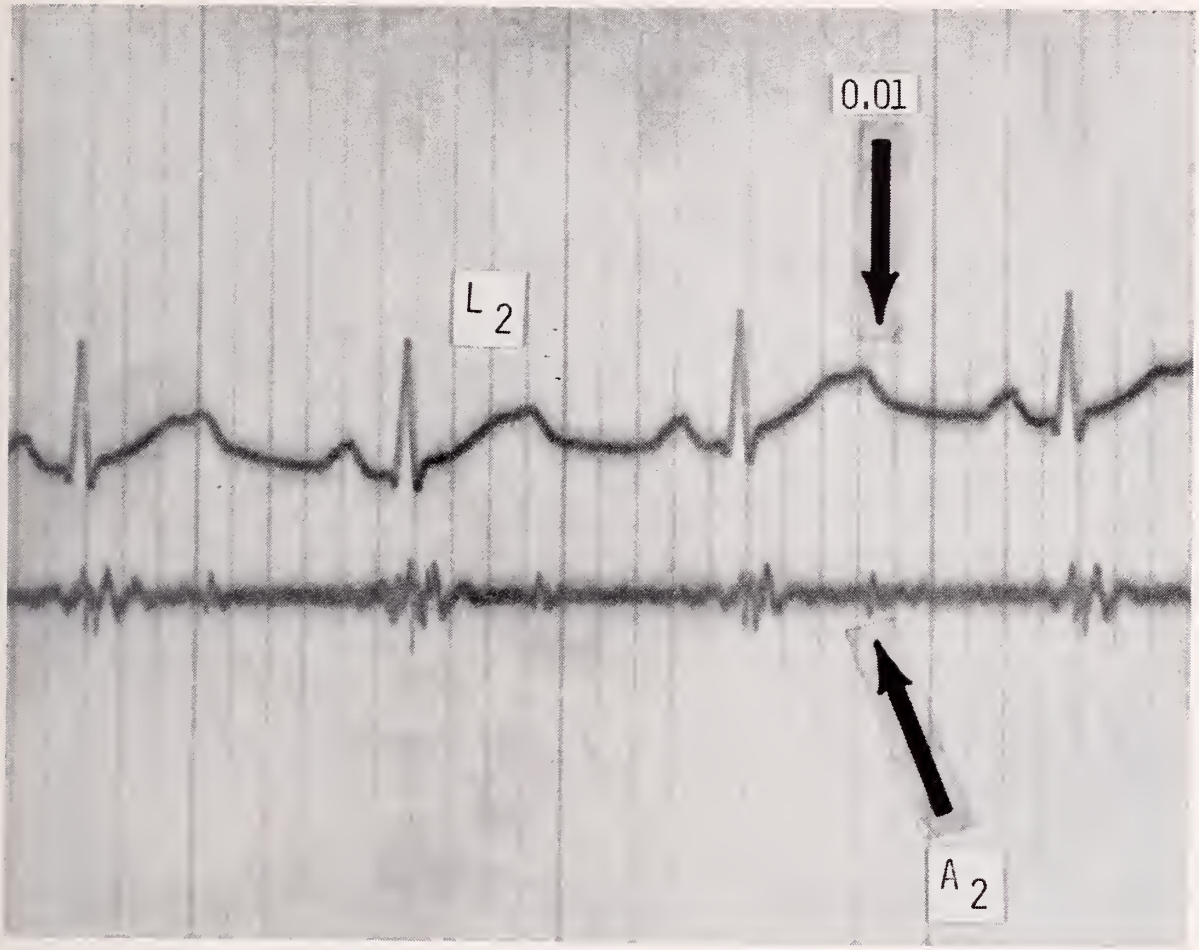

Figure 2. Simultaneous EKG and phonocardiogram.

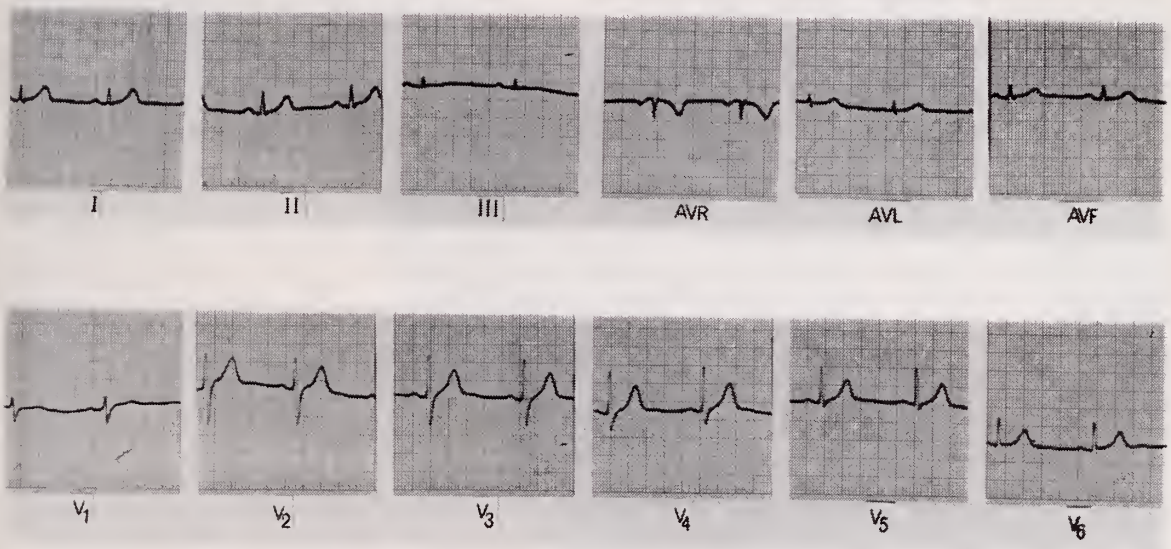

Figure 3. Tracing on the same patient as in Figure 1, one week after Mellaril was discontinued.

termination of the T wave, implying delayed electrical systole. This was demonstrated in this patient (Figure 2). No known cause for the prolongation of the Q-T interval was found in this case (Table 1). Thus, it was most likely that Mellaril was responsible for the ECG abnormality.

The effect of the phenothiazines on the electrocardiogram was demonstrated by Kelly et al, who showed increased S-T convexity, widening, inversion and flattening of T waves, and prominent U waves, following the administration of Mellaril (dosage: 200 mg/day).[3] These electrocardiographic changes have been repeatedly demonstrated in several reports.[4, 5, 6] Several fatalities have been reported in patients who received large doses (more than 600 mg/day) of Mellaril. In most cases, ventricular tchycardia followed by ventricular fibrillation had been the terminal event. It has been shown that ventricular ectopic beats which occur during the vulnerable period of a broadened T wave due to a prolonged Q-T interval considered to be a triggering mechanism of the ventricular tachyarrhythmias.[7] Huston and Bell, on the other hand, have stressed the benign nature of the Q-T prolongation in their experience.[8] The Q-T and T changes are transient and disappear when the drug is discontinued (Figure 3). The mechanism responsible for the abnormality particularly Q-T interval prolongation is thought to be related to stimulation of the sympathetic centers in the brain and to changes in the noradrenaline content of the myocardium.

Summary

Prolongation of the Q-T interval and changes in the morphology of the T wave are seen in 75 per cent of patients who are taking more than 300 mg. of Mellaril a day.[8] The recognition of these changes and the awareness of the potential risk of ventricular arrhythmias become vitally important, considering the fact that many psychiatric patients are taking large doses of this drug.

References

1. Lipman, B. S. and Massie, E.: Clinical Scalar Electrocardiography, 5th edition, Chicago, Year Book, 1965, p. 593.
2. McKusick, V. A.: Cardiovascular Sound in Health and Disease, Baltimore, Williams and Wilkins, 1958, p. 117.
3. Kelly, H. G., Fay J. E., and Laverty, S. G.: Thioridazine hydrochloride (Mellaril): Its effect on the electrocradiogram and a report of two fatalities with electrocardiographic abnormalities, Canad. Med. Assn. Jr., 89:546, 1963.
4. Ban, T. A. and St. Jean, A.: Effect of phenothiazines on the electrocardiogram, Canad. Med. Assn. Jr., 91:537, 1964.
5. Burda, C. J.: Electrocardiographic abnormalities induced by Mellaril, Amer. Heart J., 72:153, 1966.
6. Fletcher, G. F., Kazamias, T. M., and Wenger, N. K.: Cardiotoxic effects of Mellaril: Conduction disturbances and supraventricular arrhythmias, Amer. Heart J., 78:135, 1969.
7. Giles, T. D. and Modlin, R. K.: Death associated with ventricular arrhythmia and thioridazine hydrochloride, J. Am. Med. Assn., 205:108, 1968.
8. Huston, J. R. and Bell, G. M.: Effect of thioridazine hydrochloride and chlorpromazine on the electrocardiogram, J. Am. Med. Assn., 198:16, 196.

Table 1
Causes of Q-T Prolongation

1. METABOLIC
   A. Hypothroidism
   B. Hypoglycemia
2. ELECTROLYTE DISTURBANCE
   A. Hypocalcemia
3. DRUGS
   A. Experimental—Amarine
   B. Therapeutic—Quinidine, Phenothiazines ("Mellaril", "Thorazine")
4. C.N.S. DISEASE
   Sympathetic Overdrive
5. CONGENITAL
   A. With Deafness
   A. Without Deafness
6. INFLAMATORY
   Myocarditis

Imagination is more important than knowledge.

ALBERT EINSTEIN

come together!

To the 25th AMA Clinical Convention in New Orleans. Participation will be the key at this medical meeting -- you and your colleagues getting together for a useful and rewarding learning experience. Evaluating and discussing the problems of clinical medicine.

The scientific program is outstanding, with three in-depth postgraduate courses on Behavioral Problems in Children and Adolescents; Cardiovascular Disease; and Fluid and Electrolyte Balance. Other sessions you'll want to attend include Diagnostic Evaluation and Management of Joint Diseases; Dermatological Problems in Everyday Practice; Current Concepts in Gastroenterology; Office Gynecology: Management of Common Problems, and a Symposium on Diverticular Disease of the Colon. Along with these sessions are dozens of scientific and industrial exhibits to help inform you of the latest research and the newest products and services.

Plan to be there. See the complete scientific program and registration forms in the October 18th issue of JAMA.

25th
AMA Clinical Convention
November 28 - December 1, 1971
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New Orleans

A message from . . .

The President

DRUG ABUSE

THE problems of international trafficking in narcotics and the national fascination with a variety of chemical compounds by our youth are reaching new proportions in our State.

There appears to be a need for increased efforts to control drug abuse. The cost in human lives being wasted and the future costs in dollars needed for medical care are staggering. We need a firmer attitude toward the problem, better programs and treatment facilities, and a solid community effort to de-glamorize the taking of drugs.

I believe it fitting that the medical profession take positive steps to indicate our concern and put the spur to all segments of society capable of helping us control drug abuse.

Therefore, I am requesting the members of this Association to voluntarily restrict the prescribing of Schedule II drugs, within reason, and use the utmost caution in prescribing any drug with abuse potential. We are requesting other health professions to join us in this action.

The Woman's Auxiliary, whose theme this year is "The Family," is being requested to spearhead community effort and public education on drug control problems.

We are asking the West Virginia Department of Mental Health, the staff of the Regional Medical Program, and the Veterans Administration, in keeping with President Nixon's concern about this problem, to investigate the possibility of using existing VA facilities within the State as addict centers for veterans and non-veterans.

All of this means hard work, cutting of red tape and dedication of purpose. The goal, control of drug abuse, is worthy of our best effort—now!

Harry S. Weeks, Jr. M.D.

HARRY S. WEEKS, JR., M. D., *President*

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EDITORIALS

THE NEW PRESIDENT

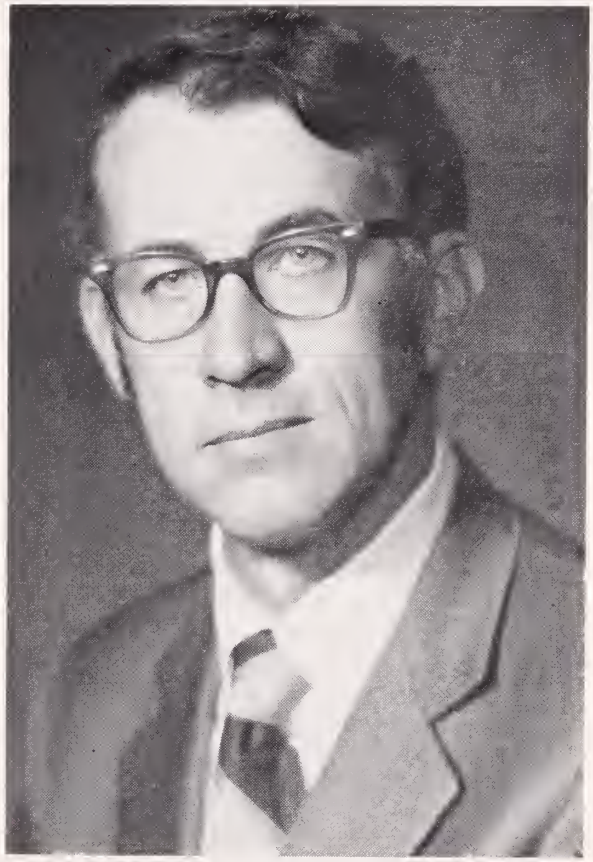
"Well, what can we do for an encore?"

This was the remark made by the new President of the West Virginia State Medical Association following a successful campaign in the field of national medical politics and a most enjoyable and educational annual meeting at The Greenbrier in August.

We don't believe it will be too long before the President answers his own question. We foresee a difficult year ahead with the Association being confronted with many problems; and we can't think of a more qualified man to be at the helm. He is an able leader and knows where to look for assistance in carrying out the various activities of the Association.

Dr. Harry S. Weeks, Jr., is a unique individual. Although still a young man, he is as knowledgeable about the affairs of the State of West Virginia as those men and women who dictate its policies.

Doctor Weeks and the retiring president, Dr. George R. Callender, Jr., were primarily responsible for looking after the interest of the members of the Association in the field of medical economics during the 1960's. They encountered great difficulties in the beginning but finally succeeded in obtaining better benefits for the



Harry S. Weeks, Jr., M. D.
President

membership when more responsible men were appointed to head several important state agencies.

While Doctor Weeks is extremely serious in connection with the profession and its problems, he also possesses a keen sense of humor. Following Dr. Carl Hoffman's successful election in Atlantic City, Dr. Frank Holroyd expressed concern about what he could find to do in his spare time after spearheading a vigorous three-year campaign.

Per the suggestion by Doctor Weeks, a miniature football was purchased and presented to Doctor Holroyd. Inscribed on the football was, "To Frank, Just for Kicks!"

A native of Clarksburg, Doctor Weeks was educated in the public schools of Harrison County and served for two years with the U. S. Navy. He received an A.B. degree in 1949 from West Virginia University and was awarded his doctor of medicine degree in 1953 from the University of Maryland. He interned at Mercy Hospital in Baltimore and had residency training in anesthesiology at Ohio Valley General Hospital in Wheeling from 1954 to 1956. Following his residency training, Doctor Weeks practiced in Clarksburg before returning to Wheeling as a member of the anesthesiology staffs at Ohio Valley General and Wheeling Hospitals.

He was certified by the American Board of Anesthesiology in 1960 and is a member and Past President of the West Virginia Society of Anesthesiologists. He also is a member of the Southern Medical Association and the American Medical Association.

Doctor Weeks has served as Chairman of the Committee on Medical Economics, as a member of the Council and as Vice President and President Elect of the Association. He also is a Past President of the Ohio County Medical Society.

Doctor Weeks currently is serving as a member of the Medical Licensing Board of West Virginia; Advisory Board for the West Virginia Regional Medical Program; and the Comprehensive Health Planning Advisory Council.

He and his wife, the former Esther Haselbacher of Clarksburg, are the parents of two daughters and two sons.

Doctor Callender, the retiring president, who automatically takes over the Chairmanship of the policy-making Council for the coming year, has devoted much of his time to Association affairs during the past decade.

Not one to pussyfoot when it came to negotiating with third-party agencies, he prodded his colleagues to go along with policies adopted by the Council. His attitude along this line was pointed out beautifully in the final portion of his Presidential Address at The Greenbrier.

Doctor Callender also assumed additional responsibilities when he was elected to serve a two-year term as one of our two alternate delegates to the AMA. He succeeded Dr. Thomas G. Reed of Charleston, who served very faithfully as an alternate for 14 years.

Drs. Weeks and Callender will have a strong Council and able committeemen to aid them in carrying out their responsibilities. We know that they also will receive full support from the entire membership.

SWEET CHARITY

At least part of the reason some doctors feel vaguely dissatisfied with the practice of medicine is that it is now almost impossible to be charitable in giving care. A good many are in medicine partially as a result of the attractiveness of that image of a kindly, benevolent doctor doing kindnesses and generally giving aid and helping free-of-charge those so unfortunate as to be sick and penniless at the same time.

That isn't to say that the same young dreamers didn't know that a good and comfortable living could be made in the practice of medicine. But there must be more to a job or a career to make it satisfying and attractive enough to spend an entire lifetime at it. The acquisition of money is rarely a good enough reason in itself to spend any more than whatever time is required at a job to collect enough money for whatever the immediate needs might be.

The opportunity to be a benefactor in any endeavor is a subtle enticement and it is this that has been partially lost. More money cannot make up for this loss. It is not just those in the medical profession who feel this loss, but we are familiar with and can cite specific illustrations as the issue applies to the practice of medicine.

There is now a penalty affixed to any charitable venture in a doctor's office through the use of fee profiles now kept on every doctor who makes charges through any governmental or insurance company program. Every time a reduced fee is recorded, the average is reduced making it impossible to collect a normal or a reasonable fee from someone else about whom the doctor need not feel quite so charitable. This is probably enough in itself to put an end to any charitable impulse but when the realization occurs that the real beneficiary is the federal government or some insurance Goliath, the impulse hasn't a chance. If the date happens to be about April 15th, the impulse is short-lived indeed.

During the arguments over Medicare it was pointed out by the medical profession that many millions of dollars worth of free care were being given yearly to the aged and that an inevitable result of Medicare would be that physicians' incomes would be increased by government payments for what was formerly free. The argument was lost. Medicare became law. Another avenue for charitable giving became the government's. Physicians' incomes, of course, went up and physicians were immediately indicted for making more money at the expense of the program. The very same thing happened with Medicaid.

It seems the term "charity" is becoming one of those strange, archaic and anachronistic words like one from Shakespeare or Chaucer. Charity is now *welfare*. The only ones allowed to feel charitable anymore are social workers employed in a federally-financed program. A shabby imitation of a cardinal virtue it must be for them, too.

Preachers speak of charity but seldom practice it. The Church, too, has lost its charitable role to the government and ecclesiastics meditate on lost feelings of Christian spirituality. It does seem strange that as the traditional concept and meaning of charity is destroyed by government, the people lose faith in government, and some even hope.

STUDENTS IN WVU MEDICAL CENTER—FIRST SEMESTER 1970

In the March, 1968, issue of *The Journal* an editorial appeared which called attention to the number of students working toward a degree in the WVU Medical Center. Since the West Virginia State Medical Association played an important part in making the Medical Center possible it is in order to keep the medical profession informed of the student enrollment. It must be remembered that four disciplines are taught in the Medical Center; in order of their founding they are: medicine, pharmacy, dentistry and nursing. Certain allied sciences also are taught. It was formerly reported that in the first semester of the school year 1967-1968, there were 945 students all working toward a degree in the Medical Center. Since that time there has been a significant increase in the number of students enrolled, and another science, physical therapy, has been added to the curriculum.

In the first semester of 1970 the enrollment was as follows: Medicine, 285; Pharmacy, 187; Dentistry, 218; Nursing, 178; Medical Technology, 37; Dental Hygiene, 87; Physical Therapy, 16; and Graduate Students, 107, a total of 1115 students. This is a large body of students and the Medical Center has a larger enrollment than many small colleges in the United States. In May, 1971, the following numbers of students were graduated from the four disciplines: Medicine, 66; Dentistry, 45; Pharmacy, 61; and Nursing, 39. There were also 20 students graduated in Medical Technology.

Besides the students working toward a degree there are a number of students in X-ray Technology and a few students from the College of Arts and Sciences. These latter named students, however, are not registered in the registrar's office of the Medical Center.

A word about the 107 graduate students is in order. These students are principally enrolled in the basic science courses (anatomy, biochemistry, microbiology, pathology, pharmacology, and physiology and biophysics) and are working toward the degree of Doctor of Philosophy which requires from three to four years, and sometimes even longer. These graduate students are critically chosen; many are obliged to take courses in higher mathematics, such as the calculus and differential equations, and also advanced work in certain courses in chemistry and physics. They are furthermore required to do biologic research and to write an acceptable thesis as well as pass certain exacting oral examinations. Some of these graduate students eventually will teach basic science courses in medical schools. It is important, therefore, that they be carefully selected and especially well trained.

Another very important educational function of the Medical Center is the training offered in the University Hospital; presently there are 100 residents, and this coming year there will be openings for 22 interns.

The physical plant which houses the health sciences in one large building, including a 530-bed hospital, is admirably adapted for the purpose. The health science students are indeed fortunate that they can take their work in such a propitious environment. As mentioned in a previous editorial, the citizens of the state of West Virginia are to be highly commended for their foresight and generosity in establishing such a splendid Medical Center.

Health Insurance Benefits

The public receives more than $\$^{3}/_{4}$ billion in health insurance benefits each month from insurance companies alone, reports the Health Insurance Institute. The nation's insurance companies paid a record $9.3 billion in benefits last year, says the Institute, an increase of nearly 20 per cent over the $7.8 billion they had distributed a year earlier.

Five years ago, in 1966, these insurance companies were paying slightly more than $\$^{1}/_{2}$ billion each month to their policyholders.

GENERAL NEWS

Dr. Harry S. Weeks Installed As Association President

The West Virginia State Medical Association installed Dr. Harry S. Weeks, Jr., a Wheeling anesthesiologist, as its President during the 104th Annual Meeting at The Greenbrier in White Sulphur Springs, August 19-21.

The installation ceremony, with Dr. George R. Callender, Jr., of Charleston, the retiring President, administering the oath to Doctor Weeks, was a highlight of the second and final session of the House of Delegates on Saturday afternoon, August 21.

Registration for the annual meeting totaled 651, including 378 physicians, and reflected an over-all increase over the previous year.

Before the installation of Doctor Weeks, Doctor Callender delivered his presidential address, the text of which appears in the scientific section of this issue of *The Journal*. Doctor Callender automatically became Chairman of the Council for the coming Association year, succeeding Dr. Maynard P. Pride of Morgantown.

Doctor McKinney President Elect

Elevated from the office of Vice President to President Elect was Dr. Worthy W. McKinney, a Beckley ophthalmologist. He will succeed Doctor Weeks as President during the 1972 Annual Meeting, also scheduled by the Council for The Greenbrier next August 23-26.

Dr. A. Thomas McCoy, a Charleston urologist, was elected Vice President to succeed Doctor McKinney; and Dr. Kenneth G. MacDonald, a surgeon also of Charleston, was re-elected Treasurer. Doctor MacDonald will be serving his seventh one-year term.

Councilors Elected

Two new members of the Council were elected, and five others were re-elected, at the final House of Delegates session. The new members are Dr. Charles E. Andrews of Morgantown, to succeed Dr. George A. Curry, also of Morgantown; and Dr. George V. Hamrick of Charleston, to succeed Doctor McCoy. Doctor Curry was not eligible for re-election after serving two consecutive two-year Council terms.

Re-elected for new two-year terms were Drs. Stephen D. Ward of Wheeling; Carl A. Liebig of Keyser; J. D. H. Wilson of Clarksburg; Joseph B. Reed of Buckhannon, and John J. Mahood of Bluefield.

Holdover Councilors whose terms expire in 1972 are Drs. William T. Lawson of Fairmont, Robert R. Pittman of Martinsburg, A. Kyle Bush of Philippi, F. Lloyd Blair of Parkersburg, Jack Leckie of Huntington, Joseph A. Smith of Dunbar, Richard G. Starr of Beckley and Thomas P. Long of Man. Doctor Pride will serve as an at-large member.

Doctor Holroyd Renamed AMA Delegate

Dr. Frank J. Holroyd of Princeton was re-elected for a two-year term as Delegate to the American

In the left photo, Dr. George R. Callender, Jr., of Charleston receives the Past President's Plaque from Dr. Maynard P. Pride (right) of Morgantown. At the right, Doctor Callender administers the oath to his successor as West Virginia State Medical Association President, Dr. Harry S. Weeks, Jr., of Wheeling.

Medical Association, with Doctor Callender elected Alternate Delegate to succeed Dr. Thomas G. Reed of Charleston. Dr. Richard E. Flood of Weirton and Dr. Albert C. Esposito of Huntington are holdover Delegate and Alternate, respectively.

Doctor Weeks Clarksburg Native

Doctor Weeks is a native of Clarksburg who received an A. B. degree in 1949 from West Virginia University and was awarded his M.D. degree from the University of Maryland School of Medicine in 1953.

He interned at Mercy Hospital in Baltimore, and had residency training in anesthesiology at Ohio Valley General Hospital in Wheeling from 1954 to 1956. After his residency, Doctor Weeks practiced in Clarksburg before returning to Wheeling as a member of the anesthesiology staffs at Ohio Valley General and Wheeling hospitals.

He was certified by the American Board of Anesthesiology in 1960, and is a member and Past President of the West Virginia Society of Anesthesiologists. He also is a member of the Southern Medical Association and the American Medical Association.

Also a Past President of the Ohio County Medical Society, Doctor Weeks has served as Chairman of the Committee on Medical Economics of the State Medical Association; a member of the Council; Vice President, and President Elect.

Doctor Weeks currently is serving as a member of the Medical Licensing Board of West Virginia; Advisory Board for the West Virginia Regional Medical Program, and the Comprehensive Health Planning Advisory Council.

He and Mrs. Weeks are the parents of two daughters and two sons.

The President Elect

A native of Henryetta, Oklahoma, Doctor McKinney received his undergraduate degree from the University of Oklahoma and was graduated from the George Washington University School of Medicine in Washington, D. C., in 1946.

Doctor McKinney interned at St. Vincent's Hospital in Jacksonville, Florida, and received his residency training at Gorgas Hospital in the Panama Canal Zone, and at the University of Pennsylvania Hospital. He also took additional postgraduate work at the University of Pennsylvania, earning an M.S. degree in Ophthalmology.

Prior to moving to Beckley in 1956, Doctor McKinney was in U. S. Army Service for about 10 years, with his duty stations including the U. S. Military Academy at West Point, New York.

A member of the Raleigh County Medical Society, Doctor McKinney has served on the State Medical Association Council, and as Chairman of the Medical Economics Committee, in addition to his year as Vice President.

The Vice President

Doctor McCoy is a native of Bluefield. He received his undergraduate degree from West Virginia University, and his M.D. degree from the Medical College of Virginia in Richmond.

After internship and residency training at the Medical College of Virginia and Memorial Hospital in Charleston, respectively, Doctor McCoy practiced for several years in Bluefield and Williamson. He then received his residency training in urology at Watts Hospital, affiliated with the University of North Carolina School of Medicine in Chapel Hill, in 1959-62.

Certified by the American Board of Urology, Doctor McCoy has served on the Medical Association's Council from 1968 until 1971.

Check for Medical School

At the first session of the House of Delegates on Wednesday afternoon, August 18, Doctor Callender presented Dr. Frank W. McKee, Dean of West Virginia University's School of Medicine, with a check for $13,305.47. This represented an annual contribution by West Virginia physicians and Woman's Auxiliary members to the School of Medicine through the Education and Research Foundation of the American Medical Association.

The House of Delegates approved one amendment to the Association's By-Laws—that increasing from $80 to $100 the annual membership dues.

Dr. Frank W. McKee (left), Dean of the West Virginia University School of Medicine, accepts from Dr. George R. Callender, Jr., of Charleston, President of the State Medical Association, a check for $13,305.47 representing one year's contributions by West Virginia physicians and their wives to the School through the American Medical Association's Education and Research Foundation.

1972 Meeting at The Greenbrier

The Council decided, at its pre-convention session, to hold the West Virginia State Medical Association's 1972 Annual Meeting at The Greenbrier in White Sulphur Springs. The meeting, the Association's 105th, will be held August 23-26.

Honor Guests

Dr. Wesley W. Hall, Reno, Nevada, surgeon and President of the American Medical Association; and Gov. Arch A. Moore, Jr., were among honor guests at the meeting. Doctor Hall addressed the opening session of the House of Delegates.

Governor Moore and Dr. C. A. (Carl) Hoffman of Huntington, West Virginia's first AMA President Elect, were honored at a reception on Wednesday evening, and both addressed the opening session of the convention on Thursday morning, August 19. Governor Moore also spoke briefly at a session of the Woman's Auxiliary.

1972 Meeting Dates

The Council voted at its pre-convention meeting on August 18 to hold the Association's 105th Annual Meeting at The Greenbrier on Wednesday, Thursday, Friday and Saturday, August 23-26, 1972.

This year's total registration of 651 surpassed the 634 of 1970. The 378 physicians registered compared with 355 last year, while the Auxiliary registration was 207 as compared to 183 in 1970. Registration of exhibitors and other guests was down 30 from last year to 66.

Pending Legislation Lacks Medical Research Funds

Although Congress and the Administration have indicated a desire to step up medical research, present legislation does not contain funds for construction of the necessary facilities.

As a result, there is a growing concern in this country that "the limit of wise and productive spending on medical research has been reached or even exceeded," according to Dr. Maurice B. Visscher, President of the National Society for Medical Research.

Doctor Visscher, in an appearance at a Senate Subcommittee on Health hearing, charged that this erroneous feeling is reflected in current legislation.

Six State Society Chiefs Attend Annual Meeting

Presidents or Presidents Elect of six other state medical associations attended sessions of the West Virginia State Medical Association's 104th Annual Meeting at The Greenbrier in August.

The Presidents on hand were Dr. M. O. Scamahorn of Pittsboro, Indiana; Dr. John C. Quertermous of Murray, Kentucky; Dr. P. John Robechek of Cleveland, Ohio, and Dr. William A. Limberger of West Chester, Pennsylvania.

Dr. William S. Hotchkiss of Norfolk, Virginia, and Dr. DeWitt E. DeLawter of Chevy Chase, Maryland, were the visiting Presidents Elect.

Nurses, Physicians To Attend Morgantown Conference

Registered and licensed practical nurses, physicians, ministers and social workers will be among those participating in a "Conference on Death and Dying" sponsored by the West Virginia Nurses Association, Inc., in Morgantown on November 6 and 7.

The West Virginia State Medical Association and the Practical Nurses Association of West Virginia, Inc., will be co-sponsors of the sessions, scheduled for the West Virginia University Medical Center Auditorium.

Conference leaders will be Mrs. Florence S. Wald, R.N., and Morris Wessel, M.D., Yale University members of the Research Team on Death. The registration fee will be $12.

Further information may be obtained from offices of the West Virginia Nurses Association, 47 Capital City Building, Charleston 25301.

West Virginia University's School of Medicine was well represented at the Medical Association's Annual Meeting. In the photo at left are these faculty members who presented a Symposium on Post-Operative Respiratory Failure at the third and final Scientific Session: left to right, Drs. David Z. Morgan, who served as Moderator; Herman Turndorf; John R. Bowers; El Sayed-Hegab, and Erdogan Tercan. In the right photo, Mr. Steve McClure, (second from left), a representative of Ross Laboratories, talks with three other WVU staff members: Drs. Alvin L. Watne (left), William G. Klingberg, and Barbara Jones.

Education Courses Scheduled At University of Kentucky

The University of Kentucky's College of Medicine in Lexington has announced these continuing education courses:

"Psychiatry Put Into Practice," November 19-20, with a $75 fee; "The Practical Ophthalmology of Childhood," December 17-18, fee $50; and "Annual Family Medicine Review," February 6-12, 1972, with a fee of $175.

All of the courses will be offered at the University of Kentucky Medical Center and have American Academy of General Practice approval. Further information may be obtained by writing Frank R. Lemon, M. D., Associate Dean for Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

Long-Term Diabetes in Monkeys Applied in New Study

Cardiovascular complications kill at least 70 per cent of all diabetics, but researchers have been hampered in their efforts to discover why by the lack of a laboratory animal model for long-term experimentation, according to the National Society for Medical Research.

Dr. John Hill, John Ochsner and Bill Baughman of the Oregon Regional Primate Research Center may have solved that problem by developing a non-human primate model with a long-term case of diabetes. They accomplish this inducement of a diabetic-like state by administering the drug streptozoticin directly to the pancreas where it affects the beta cells which produce insulin.

Dr. Maynard P. Pride Heads 1972 Program Committee

Dr. Maynard P. Pride of Morgantown will head the Program Committee for the West Virginia State Medical Association's 105th Annual Meeting in 1972, Dr. Harry S. Weeks, Jr., of Wheeling, the Association President, has announced. Doctor Weeks also appointed the following to the Committee:

Dr. A. Thomas McCoy, the Association's Vice President, and Dr. John M. Hartman, both of Charleston; Dr. Joe N. Jarrett of Oak Hill, and Dr. Alfred D. Ghaphery of Wheeling.

The Committee got off to a fast start on its work with a meeting in Charleston on Sunday, September 26.

Cleveland Foundation Offers Course in Liver Disease

The Cleveland Clinic Educational Foundation will offer an October 20-21 postgraduate course in gastroenterology entitled "The Clinical Aspects of Liver Disease," with several guest speakers to assist staff members in presenting the program.

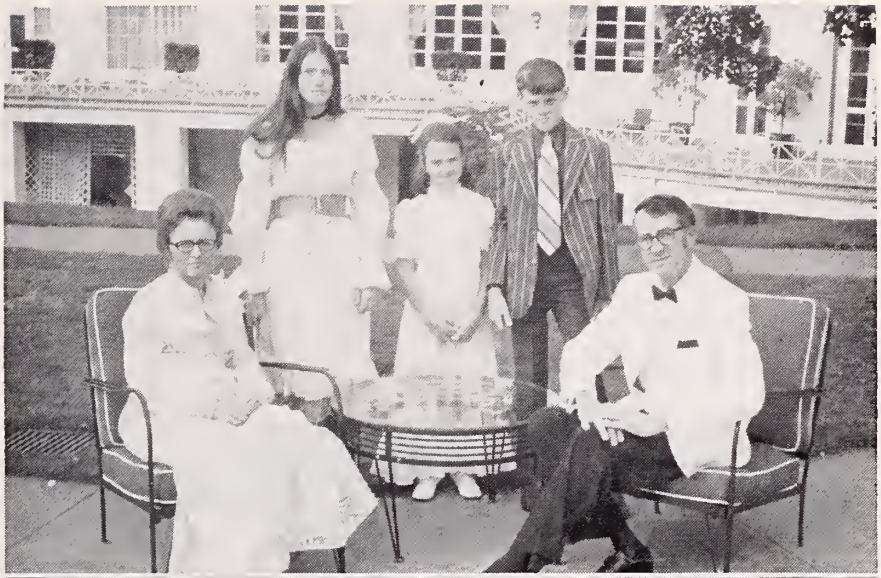
The registration fee is $60, with acceptances in the order of applications received. Further information may be obtained by writing the Education Secretary, Cleveland Clinic Educational Foundation, 2020 East Ninety-third Street, Cleveland, Ohio 44106.

In the left photo, Dr. Richard E. Flood of Weirton (left), Mrs. Worthy W. McKinney of Beckley and Dr. George R. Callender, Jr., of Charleston are pictured during the reception honoring Medical Association officers during the Annual Meeting at The Greenbrier. In the right photo, Dr. and Mrs. Wesley W. Hall of Reno, Nevada, relax during Doctor Hall's participation in the meeting in his role as American Medical Association President.

Dr. Wesley W. Hall (second from right), President of the American Medical Association, is greeted by Dr. Maynard P. Pride (left) of Morgantown upon his arrival at the Lewisburg airport en route to the State Medical Association's Annual Meeting at The Greenbrier. Others in the picture are Dr. Richard E. Flood (second from left) of Weirton and Dr. Frank J. Holroyd of Princeton, the State Association's Delegates to the AMA.

Leadership in organized medicine is represented in large measure by this quintet photographed at the Annual Meeting. Left to right are Dr. Albert C. Esposito of Huntington, President of the Southern Medical Association; Dr. Wesley W. Hall, Reno, Nevada, President of the American Medical Association; Dr. C. A. (Carl) Hoffman of Huntington, the AMA's President Elect; Dr. George R. Callender, Jr., Charleston, President of the West Virginia State Medical Association, and Dr. Harry S. Weeks, Jr., Wheeling, the State Association's President Elect who succeeded Doctor Callender during the meeting.

Here is the receiving line at the Annual Meeting reception honoring Gov. and Mrs. Arch A. Moore, Jr., and Dr. and Mrs. C. A. (Carl) Hoffman. Left to right are Dr. Wesley W. Hall, American Medical Association President, and Mrs. Hall of Reno, Nevada; Governor and Mrs. Moore; Mrs. Hoffman; Doctor Hoffman; Mrs. George R. Callender, Jr., and Doctor Callender, the State Medical Association President from Charleston.



Here are members of the West Virginia State Medical Association's new "first family." Seated at the right is Dr. Harry S. Weeks, Jr., of Wheeling, who assumed the Association Presidency near the end of the Annual Meeting in August. At his left is Mrs. Weeks. Standing, left to right, are three of the Weeks' four children, Misses Barbara and Karla Weeks, and Mr. John Weeks.

The State Medical Association elected and installed these officers at the Annual Meeting. Standing, left to right, are Dr. Charles E. Andrews of Morgantown and Dr. George V. Hamrick of Charleston, new members of the Council; and Dr. Kenneth G. MacDonald of Charleston, re-elected Treasurer. Seated, left to right, are Dr. A. Thomas McCoy of Charleston, Vice President; Dr. Harry S. Weeks, Jr., Wheeling, President, and Dr. Worthy W. McKinney, Beckley, President Elect.

Members of The Journal's Editorial Board enjoyed a luncheon meeting at The Greenbrier with other Association officers. Seated, left to right, are Drs. Halvard Wanger of Shepherdstown; James S. Klumpp of Huntington; George Evans, The Journal's editor, from Clarksburg, and Stephen D. Ward, Wheeling. Those standing are, left to right, Drs. Harry S. Weeks, Jr., of Wheeling, installed as the new Association President; William L. Cooke, Charleston, and E. Lyle Gage, Bluefield.

Drs. O'Connor, McNamara Win Medical Tennis Honors

Drs. Robert O'Connor of Charleston and William McNamara of Wheeling took first place in men's doubles in the Medical Association Tennis Tournament held in conjunction with the 104th Annual Meeting in August at The Greenbrier.

Mrs. A. G. Capinpin of Charleston and Mrs. R. S. Birckhead of Gauley Bridge took women's honors, Dr. Harold Selinger of Charleston, the Chairman of the tournament, said.

In view of the interest and participation this year, a second such event is planned during the Medical Association's 105th Annual Meeting next year, also at The Greenbrier.

Dr. George R. Callender, Jr., of Charleston and Dr. R. R. Hannas, Jr., of Lake Forest, Illinois, one of the speakers for the convention, finished second in the men's doubles, with Dr. R. S. Birckhead and Dr. John T. Chambers of Charleston taking third place.

In the women's play, Mrs. George R. Callender, Jr., and Mrs. Andrew W. Goodwin, II, also of Charleston, were second with the team of Mrs. Thomas J. Janicki of Clendenin and Mrs. Harold Selinger third.

Officers of medical societies in several neighboring states were present for the West Virginia State Medical Association's Annual Meting in August. At the left, Dr. DeWitt E. DeLawter, President Elect of the Medical & Chirurgical Faculty of Maryland, talks with Dr. L. J. Pace (center) of Princeton and Mr. James Imboden (right) of Columbus, Ohio, Field Service Officer of the American Medical Association. In the center photo, Dr. M. O. Scamahorn, President of the Indiana State Medical Association from Pittsboro, Indiana, addresses an Open Forum session. At the right, Dr. William S. Hotchkiss (left) of Norfolk, Virginia, President Elect of the Medical Society of Virginia, visits with Dr. Harry S. Weeks, Jr., of Wheeling, installed as the new West Virginia Association President.

Pictured in the left photo are speakers for the Second Scientific Session during the Medical Association's Annual Meeting. From left to right, they are Dr. J. C. Willke and his wife, Mrs. Barbara N. Willke, R. N., of Cincinnati, Ohio; Dr. Carl B. Hall of Charleston, the Moderator; Dr. Jay M. Arena of Duke University's School of Medicine in Durham, North Carolina, and Dr. R. R. Hannas, Jr., of Lake Forest, Illinois. At the right, Dr. Ronald L. Wilkinson of Morgantown talks with Dr. C. R. Davisson of Weston in front of one of the meeting's scientific exhibits.

M. D. Licensure by Endorsement Provided by Florida Law

Effective September 1, 1971, and for the first time in history, the Board of Medical Examiners of Florida may issue licenses by endorsement to practice medicine and surgery in Florida. An amendment to the Medical Practice Act of Florida, enacted by the 1971 Legislature, permits such license issuances to those physicians who have been certified by the National Board of Medical Examiners or the Federation Licensure Examination (FLEX) within a period of eight years preceding the date of application for licensure by endorsement.

Since the effective date was September 1, 1971, an M. D. must have been certified by the National Board of Medical Examiners since September 1, 1963, in order initially to be eligible for licensure by endorsement. As far as other state licensure examinations are concerned, this amendment only applies to those states who use the Federation Licensure Examination (FLEX) as their licensure examination.

In the case of foreign medical graduates, this does not eliminate the requirement that the M. D. have papers of first intention of citizenship and a minimum of one year's residency in the United States, along with the Educational Council for Foreign Medical Graduates Certificate of Proficiency.

A very important feature of the amendment is the provision that a physician who receives a license by endorsement in Florida must practice in the state within a period of three years for a minimum period of one year. If he does not do this, the license will become null and void. Service in the Armed Forces is exempt during these three years, but internship or residency time is not exempt.

Dr. Robert Crawford Retains Medical Golf Honors

Dr. Robert A. Crawford, Jr., of Charleston successfully defended his title in the Medical Golf Tournament held in conjunction with the West Virginia State Medical Association's Annual Meeting at The Greenbrier.

Doctor Crawford shot a 76 to finish two strokes ahead of Dr. Warfield Garson of Pittsburgh in the low gross competition. Dr. Charles D. Cottrell, Jr., of Charleston and Mr. William Booth of Charlottesville, Virginia, each had an 80, and Mr. Vincent Faccuito of Cincinnati an 83.

Dr. G. E. Vanston of Huntington, with a 70, won low net honors, with Dr. George A. Curry of Morgantown shooting a 71. Other low net scores included Dr. Larry S. Miller of Morgantown, 72; and Dr. William C. Morgan, Jr., of Charleston and Dr. Richard Richmond, Beckley, each with a 73.

Dr. John L. Fullmer of Morgantown won an award for the least putts, 26.

Loyola Professor To Speak At State ACS Meeting

Dr. Robert J. Freeark, Professor and Chairman of Surgery at the Loyola University Stritch School of Medicine in Chicago, Illinois, will speak at an annual fall meeting of the West Virginia Chapter, American College of Surgeons.

The sessions are scheduled for the West Virginia University Medical Center in Morgantown on November 12-13. Doctor Freeark's topic will be "The Treatment of Acute Trauma."

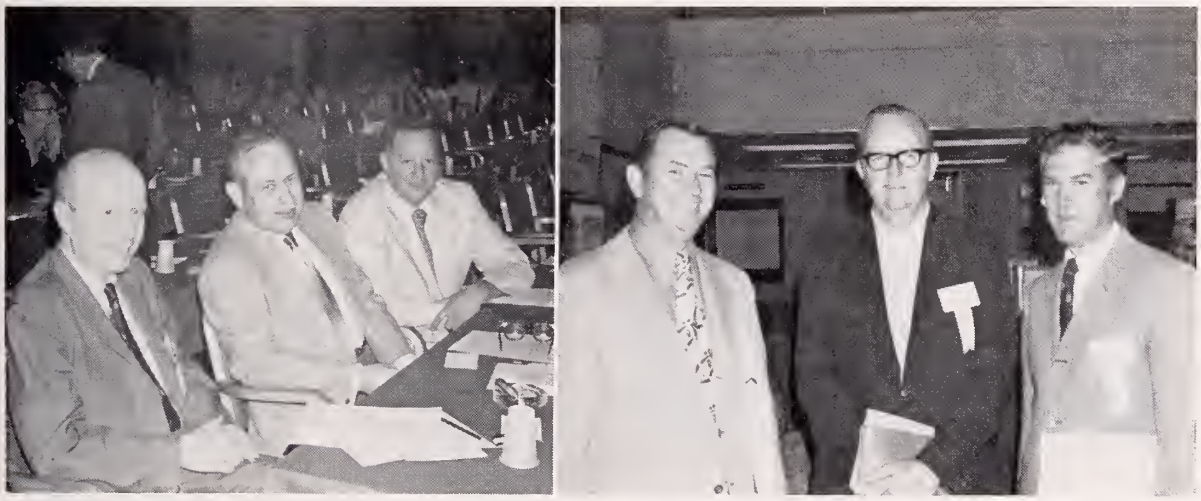
Two physicians with special interests in medical education get together during the Annual Meeting of the Medical Association at The Greenbrier. At left is Dr. Leo T. H. Bernstein of Martinsburg, pictured with Dr. Thomas H. Covey, Jr., of Morgantown, Assistant Professor of Surgery at the West Virginia University School of Medicine and Physician Consultant to the West Virginia Regional Medical Program. At the right, Dr. Gene L. Hackleman of Huntington, one of the state's new physicians, poses with his scientific exhibit on plastic surgery.

The "headliners" for the opening session of the Medical Association's Annual Meeting are pictured above, at the left. They are, left to right, Dr. C. A. (Carl) Hoffman of Huntington, President Elect of the American Medical Association; Gov. Arch A. Moore, Jr., and Dr. Clark K. Sleeth of Morgantown, Program Chairman. In the other photo are these speakers who presented a Symposium on Cancer at the First Scientific Session: Drs. Keene M. Wallace (left), Curtis P. Artz, the Moderator; Walter Lawrence, Paul H. O'Brien and H. Biemann Othersen. Doctor Lawrence is from Virginia Commonwealth University in Richmond, and the others are staff members at the Medical University of South Carolina in Charleston.

Leaders of the State Medical Association and its Auxiliary talk informally in the left photo above during the Annual Meeting reception for officers and their families. Dr. Harry S. Weeks, Jr., of Wheeling, the new Association President, is at the left, with Dr. and Mrs. M. Bruce Martin of Huntington. Mrs. Martin is the President of the Woman's Auxiliary to the Medical Association. In the photo at the right, Dr. and Mrs. John J. Mahood of Bluefield congratulate Dr. A. Thomas McCoy of Charleston, newly elected Vice President, and Mrs. McCoy (extreme left).

An informal discussion during the Annual Meeting at The Greenbrier involved (left photo) Drs. C. A. (Carl) Hoffman of Huntington (left), Kenneth G. MacDonald of Charleston, and James S. Klumpp and Jack Leckie, both also of Huntington. In the right photo, Dr. John T. Chambers (left) of Charleston is shown with Drs. Frank W. McKee and Dr. David Z. Morgan, both of Morgantown; and Herbert H. Pomerance, also of Charleston.

Enjoying a break during a scientific session at the Medical Association's Annual Meeting are, left to right in the left photo above, Drs. P. A. Tuckwiller and Theodore P. Mantz, both of Charleston, and Dr. J. E. Echols of Richwood. In the right photo, Drs. George A. Curry of Morgantown (left) and Richard W. Corbitt of Parkersburg complete their registration forms.



In the left photo, Raleigh County Delegates await the first session of the House of Delegates at the State Medical Association's Annual Meeting. Left to right are Drs. James A. Gardner, Forest A. Cornwell and C. Richard Daniel, all of Beckley. In the right photo, Drs. John M. Daniel (left) and Richard G. Starr, also of Beckley, are pictured with Dr. Robert G. Janes of Fairmont.

Pausing for some coffee and discussion during the Annual Meeting at The Greenbrier were (left photo) Dr. Daniel Hamaty (left) of Charleston; Charles D. Holland of Morgantown, Director of the West Virginia Regional Medical Program; and Dr. Mildred Mitchell-Bateman of Charleston, Director of the West Virginia Department of Mental Health. At the right, above, are Dr. N. H. Dyer (left) of Charleston, West Virginia's Director of Health; Dr. Thomas G. Reed of Charleston, and Dr. David Z. Morgan of Morgantown, Assistant Dean of West Virginia University's School of Medicine.

SMA To Open Annual Meeting Oct. 31 in Miami Beach

The Southern Medical Association, with Dr. Albert C. Esposito of Huntington as its President, will hold its 65th Annual Meeting October 31-November 4 at the Fontainebleau Hotel in Miami Beach, Florida.

Doctor Esposito will be honored at a number of the sessions, including the President's Reception on Sunday evening, October 31, and the President's Luncheon on Tuesday noon, November 2.

Albert C. Esposito, M. D.

Addressing the luncheon will be Dr. Merlin K. DuVal, Jr., Assistant Secretary for Health and Science in the U. S. Department of Health, Education and Welfare.

Dr. C. A. (Carl) Hoffman, also of Huntington and President Elect of the American Medical Association, will be among speakers at a Second General Session on Wednesday morning, November 3, that will offer a symposium on national health insurance.

With Doctor Esposito presiding, the program also will have Rep. Joel T. Broyhill, Virginia Republican and a sponsor of national health legislation in the present Congress, as a speaker. The session will be the first at which Doctors Hoffman and Esposito have appeared together, in their present roles, at a national meeting.

The Thursday morning, November 4, General Session will offer a symposium on medical economics and the business side of medicine, with pension and investment plans, office routines and other related matters to be discussed.

The Woman's Auxiliary to the SMA will offer a Doctor's Day program on Wednesday noon, and the Association then will again honor Doctor Esposito at a dinner-dance that evening.

The SMA's 21 general sections have arranged outstanding scientific programs. Some of the speakers, and the sections they will address, will include the following:

Dermatology, Dr. Robert R. Kierland, Rochester, Minnesota; Gastroenterology, Dr. Sidney F. Phillips, also of Rochester; General Practice, Dr. Jonathan O. Cole, Boston, Massachusetts; Neurology and Psychiatry, Dr. Clark H. Millikan, Rochester, Minnesota; Obstetrics, Dr. Richard W. Stander, Cincinnati, Ohio; Ophthalmology, Dr. Trygve Gundersen, Boston; Physical Medicine, Dr. Karl J. Olsen, Akron, Ohio; Surgery, Dr. James W. Pate, Memphis, Tennessee, and Urology, Dr. Wyland E. Leadbetter, Boston.

Students from each of the 34 medical schools in the area embraced by the SMA have been invited to take part in the convention, which again will feature the conferring of the annual Distinguished Service Award, along with the first Research Awards.

Other organizations and societies meeting concurrently with the SMA in November will include the Southern Chapter of the American College of Chest Physicians; The Radiological Society of North America; the Southern Gynecological and Obstetrical Society, and alumni groups from a number of southern medical schools.

Dr. Nime K. Joseph of Wheeling is the West Virginia Councilor to the SMA, with Associate Councilors including Drs. J. Elliott Blaydes, Jr., of Bluefield; Dr. John P. Griffith, Jr., of Wheeling; Dr. J. C. Huffman of Buckhannon, Dr. William L. Neal of Huntington, and Dr. Philip M. Sprinkle of Morgantown.

The SMA is the nation's largest regional medical association, with about 25,000 members in Alabama, Mississippi, Arkansas, Florida, Georgia, South Carolina, North Carolina, Virginia, Tennessee, Maryland, Kentucky, West Virginia, Oklahoma, Louisiana and the District of Columbia. It also is the second largest general medical association in the country.

State AAGP Chapter Chooses New Executive Secretary

The West Virginia Chapter, American Academy of General Practice, has appointed William B. Ferrell, Jr., of Charleston as its Executive Secretary to succeed the late Donley Schultz of Fairmont.

Mr. Ferrell, 32 and a graduate of Alderson-Broaddus College in Philippi with a B.S. Degree in Business Administration, is Director of Purchasing for Memorial Hospital in Charleston.

Potomac-Shenandoah PG Institute To Offer Varied Program

Morris Fishbein, M. D., Editor of *Medical World News* and former Editor of the *Journal of the American Medical Association,* will be among speakers at the 16th Annual Potomac-Shenandoah Postgraduate Institute.

Morris Fishbein, M. D.

Robert J. Johnson, M. D.

The Institute will be held Friday, Saturday and Sunday, October 29-31, in Martinsburg, and Doctor Fishbein will speak on "Medicine Today and in the Future" at a 7:30 P.M. banquet on Saturday.

The program again will be sponsored by the West Virginia Chapter of the American Academy of General Practice and the Potomac-Shenandoah Valley Postgraduate Institute. Institute headquarters will be at the Gateway Inn, with scientific sessions to be held at the Apollo Theater.

Dr. Halvard Wanger of Shepherdstown, the Institute's Executive Director, said that a number of outstanding clinicians have accepted invitations to deliver papers. While the program was not entirely complete as this issue of *The Journal* went to press, Doctor Wanger said that the agenda—expected to attract about 200 persons—would include speakers and subjects listed in the following paragraphs.

Friday Morning Program

The papers to be presented Friday morning:

"Anatomy of the Skin and Mucous Membranes of the Female Genitalia," Robert Johnson, M. D., Chairman, Department of Anatomy, University of Pennsylvania Graduate School of Medicine, Philadelphia.

A presentation by John J. Canary, M. D., Professor of Medicine and Head of the Department of Endocrinology and Metabolic Diseases, Georgetown University School of Medicine, Washington, D. C.

"Regional Block Anesthesia in Labor," Philip Steptoe, M. D., Assistant Professor, Obstetrics and Gynecology, Georgetown University School of Medicine.

A presentation by Doris Howell, M. D., Professor and Chairman of Pediatrics, Medical College of Pennsylvania, Philadelphia.

"Pap Smears," Larry McGowan, M. D., George Washington University School of Medicine.

A question and answer period and a round table luncheon will follow the Friday morning program.

Friday Afternoon and Evening

Friday afternoon speakers and papers will include a presentation on "L-Dopa with Adomet for Parkinson's Disease" by Joseph Fermaglicht, M. D., Assistant Professor of Neurology at the George Washington University School of Medicine.

Addressing a Friday evening dinner will be James V. Murgin, author of "The Gleam of Bayonets," a detailed history of the Civil War battle of Antietam.

Saturday Program

Papers on Saturday will include:

"Pros and Cons of Chemoprophylaxis," Clifton K. Himmelsbach, M. D., Associate Dean of Research, George Washington University Schools of Medicine and Dentistry, Washington, D. C.

"A Clinical Approach to Gout," Anthony J. Sliwinski, M. D., Assistant Professor, Arthritis Division, Georgetown University School of Medicine.

"Drug Interactions in the Treatment of Cardiovascular Patients," John Egle, M. D., Associate Professor of Pharmacology, Medical College of Virginia, Richmond.

"Current Concepts in Diabetics Management," James Moss, M. D., Assistant Professor of Medicine, Georgetown University School of Medicine.

"Pharmaceuticals and the Consumer," Armistead Lee, Director of Economic Research, National Pharmaceutical Association.

"Delivery Room Management of the Distressed Infant," David Abramson, M. D., Georgetown University School of Medicine.

"Diabetes," Theodore G. Duncan, M. D., Associate in Medicine, University of Pennsylvania School of Medicine.

Other Saturday speakers will include Joseph M. LoPresti, M. D., Associate Professor of Pediatrics, Georgetown University School of Medicine; and Roy G. Holly, M. D., Professor and Head of Obstetrics and Gynecology, Jefferson Medical College of Philadelphia.

Sunday Program

The final scientific session of the Institute on Sunday morning will be followed by the annual Sunday Luncheon.

Additional information with regard to registration fees and other Institute details may be obtained by writing to Dr. Halvard Wanger, Executive Director, Potomac-Shenandoah Valley Postgraduate Institute, P. O. Box 175, Shepherdstown 25443.

AAP's 40th Annual Meeting

The American Academy of Pediatrics will hold its 40th Annual Meeting at the Palmer House Hotel in Chicago, October 16-21.

Mrs. M. Bruce Martin Assumes Auxiliary Presidency

Mrs. M. Bruce Martin
New Auxiliary President

Mrs. M. Bruce Martin of Huntington assumed the Presidency of the Woman's Auxiliary to the West Virginia State Medical Association during the Auxiliary's 47th annual convention in August at The Greenbrier in White Sulphur Springs.

Wife of a pediatrician, Mrs. Martin succeeded Mrs. Robert J. Tchou of Williamson. She and other officers elected by the Auxiliary were installed by Mrs. G. Prentiss Lee of Portland, Oregon, President of the Woman's Auxiliary to the American Medical Association.

Other Officers Chosen

Mrs. Robert G. Janes of Fairmont was named President Elect, and she will succeed Mrs. Martin at the 1972 convention. Other new officers elected by the Auxiliary include:

Mrs. Richard G. Starr, Beckley, Vice President; Mrs. Robert R. Weiler, Wheeling, Eastern Regional Director; Mrs. Frank J. Gavlas, Martinsburg, Northern Regional Director; Mrs. A. C. Esposito, Huntington, Western Regional Director; Mrs. B. F. Puckett, Oak Hill, Southern Regional Director; Mrs. J. E. Blaydes, Jr., Bluefield, Recording Secretary; Mrs. Gary G. Gilbert, Huntington, Corresponding Secretary; Mrs. Charles E. Andrews, Morgantown, Treasurer; and Mrs. Robert R. Pittman, Martinsburg, Parliamentarian.

New Committee Chairmen

Mrs. Martin announced her appointments of committee chairmen as follows: Mrs. Wilson P. Smith and Mrs. Jose F. Maia, both of Huntington, AMA-ERF Co-Chairmen; Mrs. Pat A. Tuckwiller, Charleston, Archives and History; Mrs. William T. Lawson, Fairmont, By-laws and Handbook; Mrs. Thomas M. Howes, Morgantown, Children and Youth; Mrs. James H. Walker, Charleston, and Mrs. Joseph A. Smith, Dunbar, Community Health Activities Co-Chairmen; Mrs. Roy A. Edwards, Mrs. Larry Smith and Mrs. D. Sheffer Clark of Huntington, Convention Co-Chairmen.

Mrs. Harvey S. Klein, Huntington, Editor, State News Bulletin; Mrs. Gerald Vanston, Huntington, Circulation Manager, News Bulletin; Mrs. J. Dennis Kugel, Charleston, Finance; Mrs. Ray M. Kessel, Logan, Health Careers Fund, 1971-74, Mrs. Claude S. Lawson, Jr., Fairmont, Health Careers Fund, 1971-73; Mrs. Lyle Vincent, Parkersburg, Health Careers Fund, 1971-72.

Mrs. Winfield C. John, Huntington, Home Centered Health Care; Mrs. Harry C. Fleming, Fairmont, Health Manpower; Mrs. Karl A. Dillinger, Clarksburg, International Health Activities; Mrs. Richard O. Rogers, Jr., Bluefield, Legislation; Mrs. Harry E. Beard, Huntington, "M. D.'s Wife;" Mrs. Buford W. McNeer, Hinton, Members-at-Large; Mrs. Richard G. Starr, Beckley, Membership; Mrs. J. L. Mangus, Charleston, Mental Health; Mrs. John E. Echols, Richwood, Necrology; Mrs. John E. McKenzie, Beckley, Press and Publicity; Mrs. Myer Bogarad, Weirton, Program; Mrs. R. M. Ferrell, Lewisburg, Rural Health and Nutrition; Mrs. Arthur A. Abplanalp, Charleston, Safety and Disaster Preparedness; Mrs. Claude R. Davisson, Weston, Southern Medical Councilor, and Mrs. A. C. Esposito, Huntington, Co-Councilor; Mrs. George A. Curry, Morgantown, WA-SAMA.

Mrs. Tchou and Mrs. Joe N. Jarrett of Oak Hill are Past Presidents on the Board of Directors.

Inaugural Address

Mrs. Martin indicated, in her inaugural address, that the Auxiliary's program during the coming year will feature a heavy accent on the family, and on youth. "We will work on legislation concerning the family—especially important since 18-year-olds have the vote," she said.

She said all efforts will be continued on behalf of the AMA Education and Research Fund. And Mrs. Martin said that "we need larger schools for training physicians. There are plenty of applicants but we are turning them down."

In listing a number of specific goals, in which the first letter of each initial word spelled "The Family," Mrs. Martin began with "Together" ("I can't accomplish the job alone") and followed with health, effort, fellowship, auxiliary aims, membership, influence, loyalty and youth.

Mrs. Martin, a native of Washington, D. C., was graduated from Holy Cross Academy and Georgetown University's School of Nursing. She received a year of postgraduate training in surgical nursing

at Johns Hopkins in Baltimore, and was operating room supervisor at Children's Hospital in Washington.

President of the Woman's Auxiliary to the Cabell County Medical Society in 1964, Mrs. Martin also has headed numerous committees of that group; and for the past several years has served on the Board of the Auxiliary to the State Medical Association.

She was AMA-ERF Chairman for three years; has been Legislative Chairman and a Regional Director, and was Vice President before her term during the past year as President Elect. She and Doctor Martin are the parents of two sons and a daughter.

In her keynote message to the convention, Mrs. Lee called upon the physicians' wives to become activists in health education; volunteer services in health fields, and in political and legislative arenas. Gov. Arch A. Moore, Jr., in brief remarks to the Auxiliary, also urged the members to assume leadership roles in their individual communities.

Other guests of the Auxiliary included Mrs. Ramsay H. Moore of Dallas, Texas, President of the Woman's Auxiliary to the Southern Medical Association.

Doctor Hoffman on New Commission

Dr. C. A. (Carl) Hoffman of Huntington, President Elect of the American Medical Association, is the AMA's representative on a new 18-member Commission on Medical Malpractice appointed by the U. S. Department of Health, Education and Welfare. Wendell Freeland, a Pittsburgh, Pennsylvania, attorney, is the Commission's Chairman. The group will undertake research and analysis to identify and evaluate both causes and consequences of malpractice claims.

Looking Back 10 Years . . .

The late columnist Drew Pearson (seated center) was a principal speaker at the Potomac-Shenandoah Postgraduate Institute in Martinsburg in October, 1961. Also seated are two other guest speakers, Dr. Albert Chapman (left) and Dr. John O. Moore. Standing: Dr. Halvard Wanger of Shepherdstown, Director of the Annual Institute; and Dr. Leo H. T. Bernstein.

Record Medicare Payments

Private health insurance companies paid out more than $173 million in Part B Medicare benefits during the first quarter of this year, the Health Insurance Institute has reported. The record first quarter total —nearly $16 million more than that paid for the same period last year—was based on nearly 3 million claims that had been approved for payment.

Gov. Arch A. Moore, Jr., pictured at left with Mrs. Robert J. Tchou of Williamson, found time during the Medical Association's Annual Meeting to visit with the Association Auxiliary headed by Mrs. Tchou. In the other photo above, Mrs. M. Bruce Martin of Huntington (standing at left) and Mrs. Tchou are shown with two of the Auxiliary's honor guests—Mrs. Ramsay H. Moore (seated at left), of Dallas, Texas, President of the Woman's Auxiliary to the Southern Medical Association; and Mrs. G. Prentiss Lee of Portland, Oregon. President of the Woman's Auxiliary to the American Medical Association. Mrs. Lee installed Mrs. Martin as the new President of the West Virginia Auxiliary during that group's 47th Annual Meeting held in conjunction with the Medical Association sessions. Mrs. Martin succeeded Mrs. Tchou.

Standing and Special Committees Appointed by Doctor Weeks

The following standing and special committees have been named by Dr. Harry S. Weeks, Jr., President of the West Virginia State Medical Association, to function during his one-year term of office:

Aging

Eldon B. Tucker, Morgantown, Chairman; Thomas H. Blake, St. Albans; Myer Bogarad, Weirton; E. Lyle Gage, Bluefield; Richard Hamilton, St. Marys; and Thomas H. McGavack, Martinsburg.

Cancer

Alvin L. Watne, Morgantown, Chairman; John J. Battaglino, Jr., Wheeling; F. Lloyd Blair, Parkersburg; Harry F. Cooper, Beckley; L. Walter Fix, Martinsburg; William E. Gilmore, Parkersburg; David B. Gray, Charleston; Ray A. Harron, Bridgeport; Hu C. Myers, Philippi; Jess S. Renedo, Wheeling; John J. Schaefer, Charleston; Charles W. Thacker, Parkersburg; John W. Trenton, Kingwood; and Chauncey B. Wright, Huntington.

Constitution and By-Laws

Richard V. Lynch, Jr., Morgantown, Chairman; Richard E. Flood, Weirton; J. C. Huffman, Buckhannon; Carl B. Hall, Charleston; Sobisca S. Hall, Clarksburg; James S. Klumpp and Jack Leckie, Huntington; Athey R. Lutz, Parkersburg; and L. J. Pace, Princeton.

Insurance

C. A. Hoffman, Huntington, Chairman; Andrew J. Barger, Glen Dale; Robert L. Chamberlain, Buckhannon; John T. Chambers, Charleston; R. U. Drinkard, Wheeling; A. C. Esposito, Huntington; F. Perry Greene, Jr., Parkersburg; Upshur Higginbotham, Bluefield; Kenneth G. MacDonald, Charleston; Buford W. McNeer, Hinton; J. C. Pickett, Morgantown; and Robert S. Robbins, Wheeling.

Interprofessional Relations

William E. Gilmore, Parkersburg, Chairman.

Sub-Committees

Medico-Legal: A. J. Villani, Welch, Chairman; S. William Goff, Parkersburg; George V. Hamrick and Paul H. Revercomb, Charleston.

Medicine and Religion: Tracy N. Spencer, Jr., South Charleston, Chairman; Dwight P. Cruikshank, Parkersburg; and V. L. Dyer, Petersburg.

Medicine and Pharmacy: R. C. Cowan, Jr., Parkersburg, Chairman; Andrew E. Amick, Lewisburg; John L. Fullmer, Morgantown; and L. Dale Simmons, Clarksburg.

Medical-Dental Liaison: George L. Armbrecht, Wheeling, Chairman; Alberto G. Capinpin, Charleston; and James A. Thompson, Clarksburg.

Nurses Liaison: Richard E. Flood, Weirton, Chairman; Bert Bradford, Jr., Charleston; Wilda S. Joseph, Wheeling; Maynard P. Pride and Thomas J. Tarnay, Morgantown.

Legislative

Frank J. Holroyd, Princeton, Chairman; W. P. Bittinger, Oak Hill; J. E. Blaydes, Jr., Bluefield; John T. Chambers, Charleston; George A. Curry, Morgantown; Del Roy R. Davis, Kingwood; A. C. Esposito, Huntington; George Gevas, Parkersburg; Paul E. Gordon, Clarksburg; Louis W. Groves, Jr., Richwood; N. B. Groves, Martinsburg; Carl B. Hall, John M. Hartman and John W. Hash, Charleston; J. C. Huffman, Buckhannon; Frank V. Langfitt, Clarksburg; Jack Leckie, Huntington; Charles L. Leonard, Elkins; Milton J. Lilly, Jr., and A. Thomas McCoy, Charleston; Paul L. McCuskey, Parkersburg; John B. Markey, Charleston; Charles W. Merritt, Beckley; Thomas G. Reed, Charleston; Joseph D. Romino, Fairmont; Carl J. Roncaglione and William B. Rossman, Charleston; Robert G. Shirey, Lewisburg; Page H. Seekford, Charleston; Jack J. Stark, Belpre, Ohio; I. Ewen Taylor, Huntington; A. J. Villani, Welch; David E. Wallace, Madison; Stephen D. Ward, Wheeling; and Henry F. Warden, Jr., Bluefield.

Maternal and Perinatal Fetal Welfare

A. J. Villani, Welch, Chairman; Walter A. Bonney, Jr., Morgantown; Clarence H. Boso and Thomas J. Conaty, Huntington; Paul H. Cope, Wheeling; Robert D. Crooks, Parkersburg; Frederick H. Dobbs, Charleston; Thomas G. Folsom, Huntington; N. W. Fugo, Morgantown; George Gevas, Parkersburg; Robert Greco, Morgantown; George L. Grubb, Charleston; C. S. Harrison, Clarksburg; Edwin J. Humphrey, III, Huntington; W. Gene Klingberg, Morgantown; A. Robert Marks, Clarksburg; Rose H. McClanahan, Charleston; Charles W. Merritt, Beckley; Thomas G. Potterfield, Charleston; Meryleen B. Smith, Peterstown; Gates J. Wayburn, Huntington; and Patrick C. Williams, Jr., Charleston.

Medical Aspects of Sports

Richard W. Corbitt, Parkersburg, Chairman; K. D. Bowers, Jr., Morgantown; Oliver H. Brundage, Parkersburg; C. B. Buffington, Wheeling; J. Marshall Carter, Huntington; R. L. Chamberlain, Buckhannon; Henry R. Glass, Jr., Charleston; Joe N. Jarrett, Oak Hill; Jack C. Morgan, Fairmont; George Naymick, Weirton; W. H. Rardin, Beckley; Carl J. Roncaglione, Charleston; George W. Rose, Clarksburg; H. R. W. Vial, South Charleston; and Herbert E. Warden, Morgantown.

Medical Economics

Worthy W. McKinney, Beckley, Chairman.

Sub-Committees

Federal Medical Activities: Richard V. Lynch, Jr., Morgantown, Chairman; Charles H. Barnett, Parkersburg; Forest A. Cornwell, Beckley; Daniel Hale, Princeton; Thomas J. Holbrook, Huntington; A. Thomas McCoy and James T. Spencer, Charleston; Charles W. Thacker, Parkersburg; James H. Walker, Charleston; and James Hugh Wiley, Morgantown.

State Workmen's Compensation: Lawrance S. Miller, Morgantown, Chairman; Marshall J. Carper and W. Alva Deardorff, Charleston; Gene Lee Hackleman, Huntington; George V. Hamrick, Charleston; Thomas J. Holbrook, Huntington; James T. Hughes, Ripley; James W. Lane, Theodore P. Mantz, John B. Markey and William C. Morgan, Jr., Charleston; James E. Powers, Princeton; Jack Pushkin, Charleston; Clifford A. Stevenson, Beckley; and James H. Walker, Charleston.

Blue Cross-Blue Shield Third Party: Milton J. Lilly, Jr., Chairman; Charles E. Andrews, Morgantown; Robert W. Bess, Jr., Piedmont; John M. Bobbitt and C. A. Hoffman, Huntington; Logan W. Hovis, Vienna; Ray M. Kessel, Logan; Milton E. Nugent, Wheeling; and J. D. H. Wilson, Clarksburg.

Public Welfare—Joint Conference Committee: Thomas P. Long, Man, Chairman; R. C. Cowan, Jr., Parkersburg; C. Richard Daniel, Beckley; Richard E. Flood, Weirton; N. B. Groves, Martinsburg; John M. Hartman, Charleston; W. Gene Klingberg, Morgantown; A. Thomas McCoy and Seigle W. Parks, Charleston; and J. D. H. Wilson, Clarksburg.

Medical Education and Hospitals

Pat A. Tuckwiller, Charleston, Chairman; and Daniel Hamaty, Charleston, Vice-Chairman; Charles E. Andrews, Morgantown; Forest A. Cornwell, Beckley; E. L. Crumpacker, White Sulphur Springs; Del Roy R. Davis, Kingwood; William E. Gilmore, Parkersburg; Robert D. Hess, Bridgeport; Upshur Higginbotham, Bluefield; George M. Kellas, Wheeling; John D. Lindsay, Jr., Fairmont; Richard V. Lynch, Jr., and David Z. Morgan, Morgantown; Milan J. Packovich, Weirton; Robert R. Pittman, Martinsburg; Maynard P. Pride, Morgantown; Joseph B. Reed, Buckhannon; Thomas G. Reed, Charleston; Howard B. Sauder, Wheeling; Edwin M. Shepherd, Charleston; William S. Sheils, Huntington; Richard G. Starr, Beckley; Grover B. Swoyer, Charleston; and John W. Traubert, Wellsburg.

Medical Scholarships

Martha Jane Coyner, Harrisville, Chairman; Marshall J. Carper, Charleston; Robert D. Hess, Bridgeport; Thomas J. Holbrook, Huntington; Russel Kessel, Charleston; John Mark Moore, Wheeling; and Clark K. Sleeth, Morgantown.

Medical Emergencies and Civil Defense

John J. Mahood, Bluefield, Chairman; Harold D. Almond, Buckhannon; Dominic A. Brancazio, Weirton; Harry F. Coffman, Keyser; Salvador Diaz, Huntington; Ernest G. Guy, Philippi; Charles H. Hiles, Wheeling; John A. B. Holt, Charleston; Donald R. Lantz, Parkersburg; John J. Lawless, Morgantown; Joseph T. Mallamo, Fairmont; John B. Markey, Charleston; James G. Ralston, Clarksburg; William S. Sadler, Barboursville; Lyle D. Vincent, Parkersburg; John W. Whitlock, Beckley; and E. Andrew Zepp, Martinsburg.

Mental Health

Roy A. Edwards, Jr., Huntington, Chairman; Mildred Mitchell-Bateman, Charleston; Delmer J. Brown, Parkersburg; Randall Connolly, Vienna; Ray S. Greco, Weirton; Thomas S. Knapp, Charleston; S. Elizabeth McFetridge, Shepherdstown; L. J. Pace, Princeton; William B. Rossman, Charleston; A. L. Wanner and Stephen D. Ward, Wheeling; Charles C. Weise, Charleston; and A. C. Woofter, Parkersburg.

Military Medical Affairs

Russel Kessel, Charleston, Chairman; Bert Bradford, Jr., Charleston; Robert D. Hess, Bridgeport; and Logan W. Hovis, Vienna.

Program

Maynard P. Pride, Morgantown, Chairman; Alfred D. Ghaphery, Wheeling; John M. Hartman, Charleston; Joe N. Jarrett, Oak Hill; and A. Thomas McCoy, Charleston.

Public Service

Albert C. Esposito, Huntington, Chairman; John M. Bobbitt, Huntington; George A. Curry, Morgantown; C. R. Davisson, Weston; Leonard M. Eckmann, South Charleston; G. Thomas Evans, Fairmont; Louis W. Groves, Jr., Richwood; N. B. Groves, Martinsburg; Carl E. Johnson, Morgantown; E. Lee Jones, Wheeling; C. A. Logue, Morgantown; George E. McCarty, Parkersburg; Charles W. Merritt, Beckley; L. J. Pace, Princeton; Joseph B. Reed, Buckhannon; Page H. Seekford, Charleston; Jack J. Stark, Belpre, Ohio; Stephen D. Ward, Wheeling; and A. J. Weaver, Clarksburg.

Resolutions

Richard E. Flood, Weirton, Chairman; Richard W. Corbitt, Parkersburg; Albert C. Esposito, Huntington; Richard V. Lynch, Jr., Morgantown; A. Thomas McCoy and Seigle W. Parks, Charleston.

Rehabilitation

Buford W. McNeer, Hinton, Chairman; Jean P. Cavender, Charleston; James A. Heckman, Huntington; Thomas M. Howes, Morgantown; Francis H. Hughes, Parkersburg; Ralph H. Nestmann, Charleston; J. C. Pickett, Morgantown; Jack Pushkin, Charleston; M. D. Reiter, Wheeling; L. Dale Simmons, Clarksburg; Robert R. Weiler, Wheeling; and James Hugh Wiley, Morgantown.

Rural Health

Martha Jane Coyner, Harrisville, Chairman; Harold D. Almond, Buckhannon; Andrew E. Amick, Lewisburg; J. C. Arnett, Rowlesburg; Holmes Blair, Parkersburg; Ralph H. Boone, Sistersville; B. S. Brake, Clarksburg; Robert W. Coplin, Elizabeth; Del Roy R. Davis, Kingwood; N. H. Dyer, Charleston; Vernon L. Dyer, Petersburg; Earl L. Fisher, Gassaway; Robert R. Frye, Mannington; O. M. Harper, Clendenin; Mehmet V. Kalaycioglu, Shinnston; Charles T. Lively, Weston; Ralph McGraw, Follansbee; Joseph B. Reed, Buckhannon; Charles J. Sites, Franklin; and Charles E. Staats, Charleston.

Syphilis

N. H. Dyer, Charleston, Chairman; Hunter Boggs, Charleston; C. Y. Moser, Kingwood; Frank M. Peck, Huntington; David S. Pugh, Chester; Thomas L. Thomas, Wheeling; M. A. Viggiano, New Martinsville; Lyle D. Vincent, Parkersburg; and Isaiah A. Wiles, Morgantown.

Tuberculosis

Hugh S. Edwards, Beckley, Chairman; J. N. Aceto, Wheeling; Charles E. Andrews, Morgantown; Robert M. Biddle, Parkersburg; J. M. Brand, Chester; Oliver H. Brundage, Parkersburg; William L. Cooke, Charleston; N. Allen Dyer, Bluefield; George F. Evans, Clarksburg; G. R. Maxwell, Morgantown; Ralph H. Nestmann and Morris H. O'Dell, Charleston; Robert J. Reed, III, Wheeling; M. A. Viggiano, New Martinsville; James H. Walker, Charleston; and David H. Williams, Weirton.

SPECIAL COMMITTEES

AMA-ERF

J. Keith Pickens, Clarksburg, Chairman; Irwin M. Bogarad, Weirton; Harry F. Cooper, Beckley; John E. Echols, Richwood; John H. Gile, Parkersburg; Joseph Gilman, Clarksburg; Daniel Hale, Princeton; Robert W. Howes, Jr., Parkersburg; Joe N. Jarrett, Oak Hill; Buford W. McNeer, Hinton; David Z. Morgan, Morgantown; Jack C. Morgan, Fairmont; Earl S. Phillips, Wheeling; Donald R. Roberts, Elkins; George A. Shawkey, Charleston; Wilson P. Smith, Huntington; John W. Trenton, Kingwood; Lysle T. Veach, Petersburg; and E. Andrew Zepp, Martinsburg.

School Health

Peter A. Haley, Charleston, Chairman; R. J. Bailey, Parkersburg; J. M. Brand, Chester; Hugh M. Brown, Clarksburg; Thomas G. Folsom, Huntington; Grover C. Hedrick, Jr., Beckley; Robert G. Janes, Fairmont; Edward Shupala, Parkersburg; Paul C. Soulsby, St. Albans; Thomas L. Thomas, Wheeling; and Eli J. Weller, Weirton.

WVU Liaison

Maynard P. Pride, Morgantown, Chairman; David E. Wallace, Madison; W. T. Booher, Jr., Wellsburg; K. D. Bowers, Jr., Morgantown; J. C. Huffman, Buckhannon; Robert R. Pittman, Martinsburg; Joe N. Jarrett, Oak Hill; Robert G. Shirey, Lewisburg; Richard E. Flood, Weirton; Herman Fischer, Clarksburg; Elwood H. Heilman, Kenneth G. MacDonald and A. Thomas McCoy, Charleston; Ray M. Kessel, Logan; G. Thomas Evans, Fairmont; Kenneth J. Allen, Glen Dale; John M. Grubb, Pt. Pleasant; A. J. Villani, Welch; L. J. Pace, Princeton; Russell A. Salton, Williamson; Robert S. Robbins, Wheeling; William R. Yeager, Parkersburg; Robert W. Bess, Jr., Piedmont; Del Roy R. Davis, Kingwood; C. Richard Daniel, Beckley; Buford W. McNeer, Hinton; A. Kyle Bush, Philippi; Terrell Coffield, New Martinsville; and Ross E. Newman, Mullens.

ACA Regional Postgraduate Day In Pittsburgh Oct. 23

Physicians engaged in primary care and family practice, internists, and surgeons will be interested in the American Gastroenterological Association Regional Postgraduate Day to be held in Pittsburgh, Pennsylvania, on Saturday, October 23. One of three simultaneous programs (the others are in San Antonio, Texas, and Portland, Oregon), the format of the sessions will encourage all participants to work through real case problems in gastrointestinal diagnosis and treatment along with experts in the field.

Each registrant and the invited discussers will receive in advance the same information about the cases to be presented. As the discussion progresses, the moderator will unfold further information about results of special studies, the course and response of the patient. The latest techniques of diagnosis and management will be discussed, and brief talks on related concepts will be given, but there will be no long formal lectures. All participants will be encouraged to challenge the "experts" and express individual views.

Organized and planned by the Training and Education Committee of the AGA, the Pittsburgh program is co-sponsored with the Pennsylvania Academy of General Practice and University of Pittsburgh School of Medicine, with Dr. Lee M. Hershenson as co-ordinator. Participants will include:

Jerry S. Trier, M. D., Moderator, Associate Professor of Medicine, Boston University; Steven Schenker, M. D., Professor of Medicine, Vanderbilt University, Nashville, Tennessee; Norton J. Greenberger, M. D., Professor of Medicine, Ohio State University, Columbus; Larry C. Carey, M. D., Associate Professor of Surgery, University of Pittsburgh; Wayne W. Peternel, M. D., Chief of Gastroenterology, Mercy Hospital, Pittsburgh, and Lee M. Hershenson, M. D., Clinical Associate Professor of Medicine, University of Pittsburgh.

The program will follow this timetable: 9:00 A.M. to 12 Noon, a case of postoperative diarrhea; 12:15 P.M., luncheon (included in registration fee), and 1:30-4:45 P.M., a case of jaundice after colectomy.

The program will be held at the Pittsburgh Hilton at Gateway Center, Pittsburgh. Information about accommodations will be sent upon registration. Those attending are requested to make their own hotel reservations, mentioning the AGA Postgraduate day.

The tuition fee for practicing physicians will be $50, and that for doctors in training $15. Registration should be sent to AGA Postgraduate Courses, Box 190, McLean, Virginia 22101.

The program has been approved for six hours of prescribed credit by the American Academy of General Practice.

MLB Licenses 87 Physicians To Practice in State

The Medical Licensing Board of West Virginia licensed by reciprocity the following 41 physicians to practice medicine in the State of West Virginia at meetings held earlier this year:

Aguirre, Augusto, Parkersburg
Alavi, Sadri, Steubenville, Ohio
Balizet, Louis Bernard, Morgantown
Bosley, James Courrier, Piedmont
Bracco, Richard Anthony, Weston
Cameron, Ronald Ross, Charleston
Carneiro, Aniceto Pereira, Steubenville, Ohio
Cipcic, Joseph Anthony, Steubenville, Ohio
Clark, Robert Nelson, Morgantown
Cornwell, Creel Sayre, Jr., Morgantown

de la Cruz, Simeon Lopez, Weirton
de la Pena, Cordell Amado, Clarksburg
De Valle, Jose, Logan
Gainer, Robert Brooks, II, Morgantown
Harrison, Robert Brent, Charleston
Hartman, Ira Franklin, II, Buckhannon
Hein, Peter Leo, Jr., Morgantown
Hyde, Ernest Frederick, Jr., Fairmont
King, George Chen, Bluefield
Kipp, James Earl, Harman
Lowe, Robert Wylie, Huntington

Magno, Manuel Guerrero, Jr., Parkersburg
Marks, Jeffry Lee, Bridgeport
Mazzela, Vincent James, South Charleston
McKee, Frank Wray, Morgantown
Milic, Milorad Miladina, Weirton
Obregon, Pedro Jara, Pt. Pleasant
Rivera, Fernando T., Jr., Steubenville, Ohio
Ruehl, William Woodrow, Bruceton Mills
Sanchez, Jose Ernesto, Weirton

Semins, Howard, Morgantown
Sobhani, Hossein Chaharrashi, Glen Dale
Straw, Constance Marcile, Huntington
Svoboda, Lois Vatne, Morgantown
Svoboda, William Bancroft, Morgantown
Talbot, William Hanna, Harrisonburg, Virginia
Van Gilder, John Elman, West Union
Viger, Roland Joseph, Huntington
Vukelich, Sam, Wheeling
Wallace, Samuel Henderson, Jr., Philippi
Warren, Thomas Noble, Clifton Forge, Virginia

The following 46 physicians were licensed by The Medical Licensing Board of West Virginia by direct examination:

Afrooz, Nader, Wheeling
Allen, Joel, 5th, Charleston
Anwar, Mohammad Farooq, Moundsville
Athari-Nejad, Abolghassem, Wheeling
Bazaz, Bansi Lal, Beckley
Bencosme, Persio Antonio, Hinton
Blass, David Chesney, Masontown
Cendana, Graciano E., Jr., Charleston
Egnor, James Kesley, II, Charleston
Feaster, Stephen James, Morgantown
Gamad, Rogelio Jingco, Flint, Michigan
Gnegy, Richard, Morgantown
Gupta, G. Sri Rama, Beckley

Herrick, Richard Thomas, Martinsville
Jaicks, Christina Elizabeth, White Sulphur Springs
Joo, Yong Don, Summersville
Jupin, John Albert, Clairton, Pa.
Kim, Hak Lim, Williamson
Lamp, Lloyd Martin, Morgantown
Leap, Herman Leslie, Jr., Huntington
Lim, Pedro Kho, Huntington
Lim, Raymond Ang, Summersville
Marsh, Charles Fielding, Morgantown
McFarlane, John Trevor, Morgantown
Medrano, Jose Navarro, Wheeling
Mehta, Rasillal Bhaichand, Beckley

Melnik, Evelyn Hearl, Charleston
Murthy, C. N. Khishna, Beckley
Kothari, Nikhil Himatlal, Hamilton, Ohio
Ortiz, Julio Amado, Man
Oyco, Jose Landicho, Beckley
Pathak, Kalindi Shridhar, Lakewood, Ohio
Peters, Phillip Joseph, Morgantown
Pratt, Lee Harold, Morgantown
Religioso, Erson Leopando, Beckley
San Pedro, Jorge Jose, Man
Serene, Michael David, Akron, Ohio

Snedegar, Maxwell Benton, Tallmadge, Ohio
Song, Young Jo, Philippi
Sontheimer, Gary Gene, Morgantown
Stewart, Russell Morgan, III, Morgantown
Tadros, Nazmi Aziz, Charleston
Taylor, Mary Belle, Charleston
Tismo, Patrio Dacuyan, Charleston
Ulch, George Alan, Great Lakes, Ill.
Vossoughi, Houshang, Welch
Webb, Deleno H., III, Morgantown

The next meeting of the MLB will be held at The Capitol in Charleston on October 11, 1971, for the purpose of licensing physicians by reciprocity to practice medicine in the State of West Virginia.

Actuarial Study Released On Health Proposals

A comprehensive actuarial study of all of the major proposals for national health insurance arrangements prepared by HEW has been released for the information of Congressional committees studying the issue.

The actuarial report's prediction of gross underfinancing in the Kennedy proposal for federal assumption of the bulk of health care costs was the most noteworthy item in the 83-page report. The work was reviewed by outside experts to check on its fairness and soundness.

The major plans before Congress would compare in terms of additional costs to the government as follows: Administration—$2.6 billion; Kennedy—$59.4 billion; Medicredit (backed by the AMA)—$6.3 billion; Burleson (the health insurance industry plan)—$7.3 billion; Javits (medicare for all)—$41.6 billion; Hall-Long (catastrophic only)—$3.2 billion, $3.1 billion; and Pell-Mondale (mandated employer plans, health care corporations)—$4.9 billion.

For the most part, these costs represent "transferred" spending from the private sector to the federal sector. In the case of Medicredit, financed largely by tax credits for purchase of comprehensive private insurance, most of the "cost" represents a revenue loss rather than an additional expense.

The HEW report said overall federal spending under the Kennedy bill, including existing programs it would take over, would total $81.6 billion in the fiscal year 1974, but that the proposed financing would raise only $57 billion. Thus, it would be under-financed by 43 percent, or $24.6 billion.

Pre-Convention Council Meeting At The Greenbrier, Aug. 18

The Pre-Convention Meeting of the Council was held at The Greenbrier in White Sulphur Springs on Wednesday, August 18, with the Chairman, Dr. Maynard P. Pride of Morgantown, presiding.

Doctor Pride introduced the following guests at the meeting: Dr. Wesley W. Hall of Reno, Nevada, President of the American Medical Association; Dr. William S. Hotchkiss of Norfolk, Virginia, President Elect of the Medical Society of Virginia; and Mr. Shideler Harpe, Director of Officers Services of the American Medical Association, who accompanied Doctor Hall and his wife to the Annual Meeting.

Doctor Pride also introduced Dr. C. A. Hoffman of Huntington, President Elect of the American Medical Association. Doctor Hoffman called upon the officers of the Association to strengthen the Insurance Committee in view of the current situation in re malpractice insurance. He also called upon West Virginia physicians and their wives to work closely with their congressmen in consideration of legislation of interest to the medical profession.

Dues Increase

Doctor Pride reported that members of the Executive Committee had voted unanimously to recommend to the House of Delegates that dues be increased from $80 to $100, effective January 1, 1972.

State Narcotic License Registration

It was reported that the Monongalia County Medical Society had instructed its delegates to the State Medical Association to propose that the Association take steps to try to rescind the new state law requiring state narcotic license registration and the use of another number. This matter was referred to the Legislative Committee for study.

New Compensation Commissioner

Dr. Kenneth G. MacDonald of Charleston, part-time Medical Consultant to the Workmen's Compensation Fund, reported that Gov. Arch A. Moore, Jr., had appointed Edgar F. Heiskel, III, as Commissioner of the Workmen's Compensation Fund, succeeding Fred L. Davis, Jr., who resigned.

Doctor MacDonald said he was sure the Association would be able to continue the close relationship with the Fund which had been established during the tenure of Mr. Davis. Mr. Heiskel is the son of the late Dr. Edgar F. Heiskel, Jr., of Morgantown.

The Council voted unanimously to direct a letter of thanks to Mr. Davis for his wonderful cooperation during his term of office.

Third-Party Programs

Dr. Worthy W. McKinney of Beckley, Chairman of the Medical Economics Committee, reported that officers of the Association met in July with officials of various third-party programs.

He said that Mr. Harold N. Wilson of Parkersburg, Director of the CHAMPUS program in West Virginia, and another member of his staff, were present at the meeting to discuss several problems from both the intermediary's and the physician's viewpoint. Doctor McKinney said he believed much was accomplished as a result of the discussion.

It was reported that CHAMPUS officials said they had very few complaints in connection with reimbursement to physicians for services rendered to dependents of armed services personnel; also, it was recommended that the billing form be simplified.

Doctor McKinney said that Mr. C. Judson Pearson and several members of his staff also attended the July meeting. Mr. Pearson is Managing Director of Blue Cross Hospital Service in Charleston, the fiscal intermediary of Part A of Medicare in West Virginia. Doctor McKinney said there was much discussion concerning the administration of the program and that Mr. Pearson and his staff agreed to work closely with the Association in seeking solutions to existing problems.

The Chairman also reported that he and Dr. Buford W. McNeer, Chairman of the Rehabilitation Committee, planned to meet on September 16 with officials of the Division of Vocational Rehabilitation. He said that specialty sections had supplied the necessary information concerning usual, customary and reasonable charges which will enable Association representatives to present this information to Mr. Thorold S. Funk, the Director. He said it is hoped that it will be possible to bring the fees paid by the Division more in line with those paid by other state agencies.

Dr. J. L. Mangus of Charleston, Medical Consultant to the Department of Welfare, reported that Commissioner Edwin F. Flowers was unable to attend the Council meeting. He extended the Commissioner's sincere regrets.

Doctor Mangus reported that there had been no basic changes in the Welfare program inasmuch as the Department was deferring any action until such time as the Congress makes a final decision concerning legislation on the national level. He said the pending legislation could have much bearing on the Title XIX program.

He said Commissioner Flowers planned to meet with members of the Association's Joint Conference Committee before making any changes in the Title XIX program.

1972 Meeting at The Greenbrier

It was reported that the management at The Greenbrier was holding the dates, August 23-26, 1972, for the 105th annual meeting of the West Virginia State Medical Association.

The Council went on record unanimously as approving The Greenbrier as the place for the 1972 meeting during the above mentioned dates.

Retiring Councilor

Dr. George R. Callender, Jr., of Charleston, the President, reported that Dr. George A. Curry of Morgantown had completed two consecutive terms of service as a member of the Council and therefore would not be eligible for reelection.

The Council voted unanimously to express sincere thanks and appreciation to Dr. Maynard P. Pride of

Morgantown for his dedicated service as Chairman of the Council during the past year.

The Council meeting was attended by Dr. Maynard P. Pride of Morgantown, Chairman; Dr. George R. Callender, Jr., of Charleston, President; Dr. Harry S. Weeks, Jr., of Wheeling, President Elect; Dr. Worthy W. McKinney of Beckley, Vice President; Dr. Kenneth G. MacDonald of Charleston, Treasurer; Dr. Richard W. Corbitt of Parkersburg, Councilor at Large; and Drs. Stephen D. Ward of Wheeling; George A. Curry of Morgantown; Thomas P. Long of Man; Robert R. Pittman of Martinsburg; A. Kyle Bush of Philippi; Joseph B. Reed of Buckhannon; Jack Leckie of Huntington; Joseph A. Smith of Dunbar; A. Thomas McCoy of Charleston; Richard G. Starr of Beckley; and John J. Mahood of Bluefield.

The meeting also was attended by Dr. Wesley W. Hall of Reno, Nevada, President of the American Medical Association; Dr. William S. Hotchkiss of Norfolk, Virginia, President Elect of the Medical Society of Virginia; Dr. C. A. Hoffman of Huntington, President Elect of the American Medical Association; Dr. Frank J. Holroyd of Princeton, AMA Delegate; Dr. Richard E. Flood of Weirton, AMA Delegate; Dr. A. C. Esposito of Huntington, AMA Alternate; Dr. James S. Klumpp of Huntington, Parliamentarian; Dr. N. H. Dyer of Charleston, Director of the State Department of Health; Dr. L. J. Pace of Princeton, Past President of the Association; Dr. J. L. Mangus of Charleston, Medical Consultant to the Department of Welfare; Mr. Shideler Harpe, Director of Officers Services of the American Medical Association; and Mr. William H. Lively of Charleston, Executive Secretary.

Stray Cats Found Harboring Several Rare Diseases

A single-cell parasite which can result in blindness or death for man has been found in stray cats by Dr. Gordon Wallace of Hawaii, according to the National Society for Medical Research.

Scientists at the National Institute of Allergy and Infectious Diseases (NIAID) last year identified the domestic cat as a possible reservoir of "toxoplasmosis," a disease caused by the parasite Toxoplasma gondii.

Two separate studies conducted by Doctor Wallace, a researcher at NIAID's Laboratory of Parasitic Diseases, Pacific Research Section in Hawaii, verify the laboratory information concerning the cats as reservoirs of the parasite, and indicate that two species of filth flies may aid in the transmission of the disease from cat feces to the food chain ending with man.

Blood studies showed that 29 per cent of 320 cats older than six months had antibodies to the protozoan parasite, indicating a previous infection. Antibodies were found in only seven per cent of the cats under six months of age. The lack of antibodies in the young cats is explained by the hypothesis that the disease in cats is usually acquired through the ingestion of an intermediate host of the parasite, such as a rodent or bird. Ordinarily, a young cat is not very successful in capturing these creatures.

Dues Increase Approved

The House of Delegates of the West Virginia State Medical Association adopted the following amendment to the By-Laws during the 1971 Annual Meeting at The Greenbrier, which will be effective January 1, 1972:

Amend Chapter I, Section 7, by deleting the figure, "$80," and substituting therefore the figure, "$100."

Pathologists' Program Centers On Clinical Toxicology

The West Virginia Association of Pathologists, Inc., scheduled its annual fall meeting for October 2 and 3 at Charleston General Hospital in Charleston.

The scientific sessions were shaped to cover various aspects of clinical toxicology, with the following guest speakers and subjects:

Dr. Harold McNair, Professor of Chemistry at Virginia Polytechnic Institute in Blacksburg, Virginia, "Principles of Gas Chromatography."

H. E. Sine, Ph. D., Associate Biochemist, The Genesee Hospital, in Rochester, New York, "The Necessity of Emergency Drug Analysis."

Robert V. Blanke, Ph. D., Toxicologist, Office of Chief Medical Examiner, Richmond, Virginia, "Trends in Clinical Toxicology."

A workshop in gas chromatography was arranged under sponsorship of Bendix Corporation.

Physicians from Other States Attend Annual Meeting

Physicians from 19 states; the District of Columbia, and the nations of West Germany, France and Canada were among those attending the West Virginia State Medical Association's 104th Annual Meeting in August at The Greenbrier.

Registration cards showed physicians traveled to White Sulphur Springs from such far-away states as California, Nevada, Connecticut and New Hampshire. Other states from which physicians were registered:

Florida, South Carolina, Ohio, North Carolina, Kentucky, New York, Pennsylvania, Alabama, Virginia, Maryland, Wisconsin, New Jersey, Illinois, Michigan, and Indiana.

Medical Societies, Sections Choose New Officers

New officers have been named by several scientific sections, associations and societies affiliated with the West Virginia State Medical Association. The organizations held meetings in conjunction with the 104th Annual Meeting of the Medical Association at The Greenbrier in August. In some instances, officers actually were elected earlier, and participated in the meetings.

The groups and officers are as follows:

West Virginia Radiological Society—Dr. Joel Allen of Charleston, President; Dr. J. N. Aceto, Wheeling, Vice President, and Dr. Andrew W. Goodwin, II, of Charleston, Secretary.

Section on Surgery—Dr. Maynard P. Pride, Morgantown, Chairman.

Section on Orthopedic Surgery—Dr. James H. Wiley, Morgantown, President; Dr. Robert R. Weiler, Wheeling, Vice President, and Dr. Arthur A. Abplanalp of Charleston, Secretary-Treasurer.

Section on Urology—Dr. Harold N. Kagan, Huntington, President, and Dr. A. Thomas McCoy of Charleston, Secretary-Treasurer, both continuing for another year.

Section on Internal Medicine—Dr. James T. Hughes, Ripley, re-elected Chairman.

West Virginia Association of Pathologists—Dr. Dennis S. O'Connor of Huntington, President; Dr. Herman Fischer of Clarksburg, Vice President, and Dr. Karl L. Klapproth of Charleston, Secretary-Treasurer.

West Virginia State Society of Allergy—Dr. Martin D. Reiter, Wheeling, President, and Dr. Merle S. Scherr, Charleston, Secretary-Treasurer, continuing for another year.

West Virginia Society of Anesthesiologists—Dr. William N. Walker, Jr., of Bridgeport, President; Dr. David E. Yoho of Glen Dale, Vice President, and Dr. Elbert L. Linger, Clarksburg, Secretary-Treasurer.

West Virginia Chapter, American Academy of Pediatrics—Dr. Barbara Jones, Morgantown, Chairman, and Dr. Ruth Phillips, also of Morgantown, Secretary-Treasurer.

Section on Neurology, Neurosurgery and Psychiatry—Dr. W. W. Spradlin of Morgantown, President, and Dr. Thomas S. Knapp, Charleston, Secretary.

West Virginia District Branch, American Psychiatric Association—Dr. Stephen D. Ward, Wheeling, President; Dr. Russell L. Heinlein, Charleston, President Elect; Dr. Albert L. Wanner, Wheeling, Secretary, and Dr. David H. Smith, Wheeling, Treasurer.

Change of Address

Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. Notices should be mailed to Box 1031, Charleston, West Virginia 25324.

Medical Meetings

The following is a partial list of national, state and district medical meetings scheduled in the coming months.

1971

Oct. 1-8—AAGP, Miami Beach.
Oct. 11-14—Ind. Medical, Indianapolis.
Oct. 14-17—Va. Medical, Arlington.
Oct. 16-21—Am. Acad. of Ped., Chicago.
Oct. 16-20—Am. Soc. of Anes., Atlanta.
Oct. 18-22—ACS, Atlantic City.
Oct. 24-28—Am. Col. of Chest Phys., Philadelphia.
Oct. 31-Nov. 4—Sou. Med. Assn., Miami Beach.
Nov. 3-6—Am. Soc. of Cyt., Washington.
Nov. 8-11—Pa. Medical, Lancaster.
Nov. 9-16—Am. Heart Assn., Anaheim, Calif.
Nov. 28-Dec. 1—AMA Clinical, New Orleans.
Dec. 4-9—Am. Acad. of Derm., Chicago.
Dec. 5-7—Am. Society of Hema., San Francisco.
Dec. 6-8—Sou. Surg. Assn., Hot Springs, Va.

1972

Jan. 24-26—Soc. of Thoracic Surg., San Francisco.
Jan. 30—5th Mid-Winter Conf. on Chest Diseases, Charleston.
Feb. 4-12—Am. Soc. of Clin. Path. & Col. of Am. Path., Atlanta.
Feb. 5-6—AMA Cong. on Med. Educ., Chicago.
March 1-5—Am. Col. of Cardiology, Chicago.
March 2-4—Central Surg. Assn., Chicago.
March 6-7—Int. Acad. of Path., Chicago.
March 27-30—Southeastern Surg. Cong., Washington.
April 3-8—Am. Col. of Rad., Bal Harbour, Fla.
April 13-18—Am. Derm. Assn., Dorado Beach, P. R.
April 16-20—Am. Assn. of Neu. Surg., Boston.
April 16-21—ACP, Atlantic City.
April 17-20—Am. Col. of Ob. & Gyn., Chicago.
April 21-23—W. Va. Chapter, AAGP, Charleston.
April 24-29—Am. Acad. of Neurology, St. Louis.
April 26-29—Am. Ped. Soc., Atlantic City.
April 26-29—W. Va. Acad. of Oph. and Otol., White Sulphur Springs.
May 1-3—Am. Assn. for Thoracic Surgery, Los Angeles.
May 1-5—Am. Psy. Assn., Washington.
May 3-5—Maryland Medical, Baltimore.
May 3-6—W. Va. Chap., ACS, White Sulphur Springs.
May 6—Am. Col. of Psy., Dallas.
May 8-12—Ohio Medical, Cincinnati.
May 18-20—Am. Gyn. Soc., Hot Springs, Va.
May 21-24—Am. Thoracic Soc., Kansas City.
May 22-25—Am. Urol. Assn., Washington.
June 8-14—Am. Rheumatism Assn., Dallas.
June 18-22—AMA, San Francisco.
June 24-25—Am. Diabetes Assn., San Francisco.
July 5-10—Int. Col. of Surg., Lake George, N. Y.
Aug. 7-10—Am. Hosp. Assn., Chicago.
Aug. 24-26—105th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.
Sept. 7-9—Am. Assn. of Ob.-Gyn., Hot Springs, Va.
Sept. 9—Ky. Medical, Louisville.
Sept. 11-12—AMA Cong. on Occupational Health, Chicago.
Sept. 18-22—Pa. Medical, Lancaster.
Sept. 22-28—AAGP, New York.
Sept. 25-29—Am. Acad. of Oph. and Otol., Dallas.
Sept. 30-Oct. 4—Am. Soc. of Anes., Boston.
Oct. 2-6—ACS, San Francisco.
Oct. 10-12—Ind. Medical, Indianapolis.
Oct. 14-19—Am. Acad of Ped., New York.
Oct. 25-29—Am. Col. of Chest Phys., Atlanta.

The West Virginia Medical Journal

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Vitallium Cranioplasty

E. Lyle Gage, M. D.

Cranioplasty, or repair of holes in the skull, has taxed the skill and ingenuity of mankind for centuries. In days of hand to hand combat, blows from clubs, maces, spears, and stones, and falls from walls or horses accounted for most of the traumatic destruction of skull bone. Syphilis and tumors caused a few more cases of holes in the head, but syphilis of the cranium is now nearly a thing of the past. Tumors and their removal, and congenital holes still account for a small percentage of decompressions, but accident and homicidal or war injuries have become the great causes of skull defects.

In 1941, most of the head injuries admitted to our hospital were from mine accidents. Today, automobile and motorcycle accidents account for most of the head injuries which we treat.

Cars are moving faster than ever before on rural streets and highways. Twelve per cent of the non-urban vehicles now travel 70 miles per hour or over and, according to the Bureau of Road Survey, the percentage of cars exceeding 60 miles per hour on rural roads has tripled in the past decade. Drivers, in our area at least, too often are careless, distracted or intoxicated.

Miners, industrial workers for the telephone and power companies, and even the tree trimmers now wear hard hats to protect their skulls. Several municipalities are requiring helmets for motorcyclists, and seat belts are universally placed in new cars.

Despite these precautions, there still are head injuries with skull destruction. Repair of these defects in the skulls of the injured, and of some of those operated upon, has required skull plating or cranioplasty in a number of our patients.

Thirty-five consecutive cases of skull plating with pre-formed vitallium plates plus one with thin stainless steel, one with stainless steel mesh, and one with tantalum plate constitute the basis for this report. Two were for defects in the skull due to osteomyelitis. One was for a congenital defect in the frontal bone and five were for defects resulting from the removal of tumors of the frontal bone, (3 eosinophic granuloma, one hemangioblastoma, and one osteoma).

The Author

- **E. Lyle Gage, M. D., Bluefield Sanitarium Clinic, Bluefield.**

Five platings were for defects resulting from removal of bone flaps involved in cases of meningioma, and 25 were done to repair defects due to compound, comminuted fractures of the skull.

Some defects were previously plated with tantalum, but only one patient is reported here for illustration and his plating was required because of severe trauma to the left frontal region. The result of this plating was good.

The vitallium plates are chromium, cobalt and molybdenum alloys prepared and treated by special processes, and they are extremely tough and firm. They are dye cast, corrosion resistant, nonallergenic, and free of electrolytic and other reactions in the tissues.

Venable and Stuck,[1] in their paper on electrolysis controlling factor, stated: "A piece of silver wire was attached to the cathode and different metal-lined plates in turn to the anode with physiological solution of Sodium Chlorides as the electrolytes. When any of the common metal appliances were used, more than 200 microamperes were registered. With vitallium, on the other

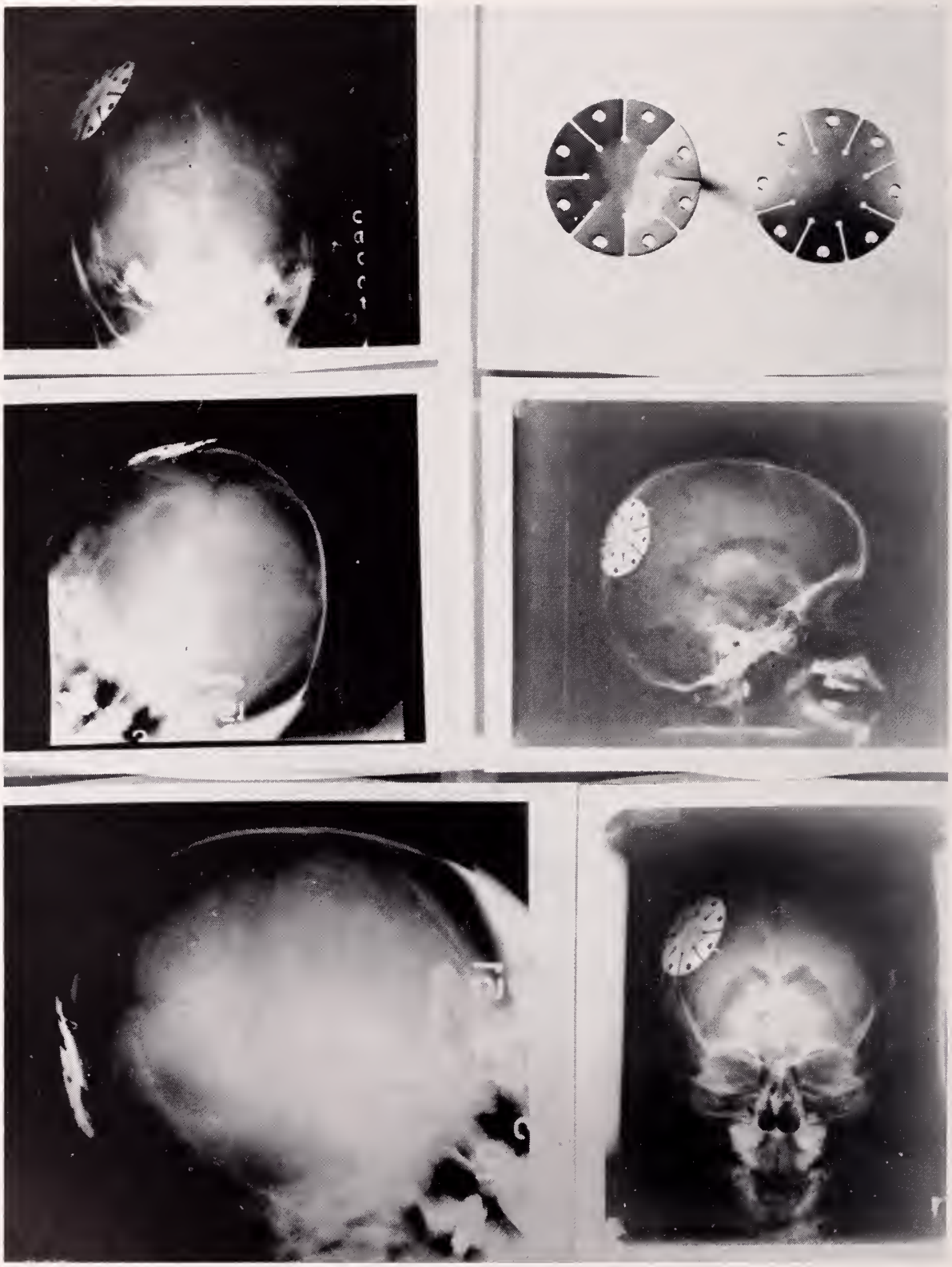

Figure 1. X-rays of patient Michael D. and picture of depressed plate and new plate the same size.

hand, the micrometer registered only 2-3 microamperes at the instant of immersion and immediately reverted to 0 where it remained in spite of agitation. When the poles were reversed and zinc was attached to the anodes with vitallium at the cathode, a slight momentary reversal of current was shown which immediately disappeared."

Even pure gold reportedly does not have this remarkable degree of passivity.

Because of these factors, and the satisfactory results obtained in early cases of plating, vitallium has been the metal plate most often used in our practice.

Indications

Indications for metallic cranioplasty are the same as for any other type as was summarized by Grant and Norcross[2] in their classical paper. These indications include:

1. Severe headaches and other symptoms of the so-called syndrome of the trephined such as dizziness, vague discomfort at the site of the defect, a feeling of fear, apprehension, insecurity, mental depression and intolerance to vibration. These symptoms often are severe when there is movement of the intracranial contents of the decompression.

2. The danger of trauma to the site of the defect and fear thereof.

3. Pulsating or painful defects.

4. Deforming and unsightly defects.

5. The assumed or hoped for relief of an associated convulsive state by preventing the tug on the brain at a mobile decompression site, especially if a venous sinus or large dural vessel is involved.

6. There has been sufficient time since the decompression to insure freedom from infection, at least three months.

Contraindications

The contraindications for the use of the plate are:

1. Infection present or recent.

2. Extremely thin scalp and a large defect.

3. Aversion on the part of a patient to having a plate put in his head.

4. Possible early recurrence of a tumor.

5. Other needs for a decompression.

Criteria for Application

Certain, rather strict rules for application must be followed if trouble is to be avoided and the best results obtained.

1. There must be absence of infection.

2. Rigid, sterile technique is necessary, and the dura should have been closed by sutures or by repair with fascia or dural substitute.

3. The plate must fit the defect as nearly as possible and may be bent or trimmed with wire cutters and metal shears, if necessary.

The allowable contouring of vitallium must be kept at a minimum and performed with care. The variable sizes and shapes of the pre-cast vitallium plates obviate the necessity of much trimming. Reverse contouring or extensive bending should be avoided.

4. The scalp flap must have an adequate base for circulation and the line of incision in the scalp should not pass over the defect in the skull, but around and well outside of it.

5. The pericranium should be stripped from the bone edge and then be brought back over the edge of the plate after the screws are in place.

6. Metal screws of the same metal as the plate, and of sufficient number and proper length, should be used to firmly set the plate.

7. Serum accumulation under the scalp, if sufficient in amount to raise the scalp away from the plate, should be carefully aspirated with sterile technique by a needle inserted beneath the scalp from a distance, and a firm elastic bandage then applied. The disadvantage of these metal plates are:

1. They are *partially* impermeable to x-ray.

2. Vitallium and steel metals are quite hard, and it is difficult to adjust them in shape when much contouring or bending is necessary. (Tantalum is more malleable and the mesh of tantalum or steel is more easily adjusted.)

3. Like all metals, when subjected to exposure to intense sunlight or to freezing cold through the scalp, the temperature of vitallium changes, and this change may be greater than that of the body and may cause unpleasant sensation. The same is true for tantalum or steel.

The advantages of vitallium are many: The cost of the plates is nominal. They are preformed, perforated, and are available in numerous shapes and sizes. They are always ready on short notice. Application of the vitallium plate is easy, and the operation time is short. The plates are hard but not brittle and furnish ample protection over the skull defect. (Tantalum preformed plates are similar and are now available).

Thin stainless steel is light and can be trimmed easier but requires perforation and fitting with difficulty. Wire mesh is easily shaped, can be

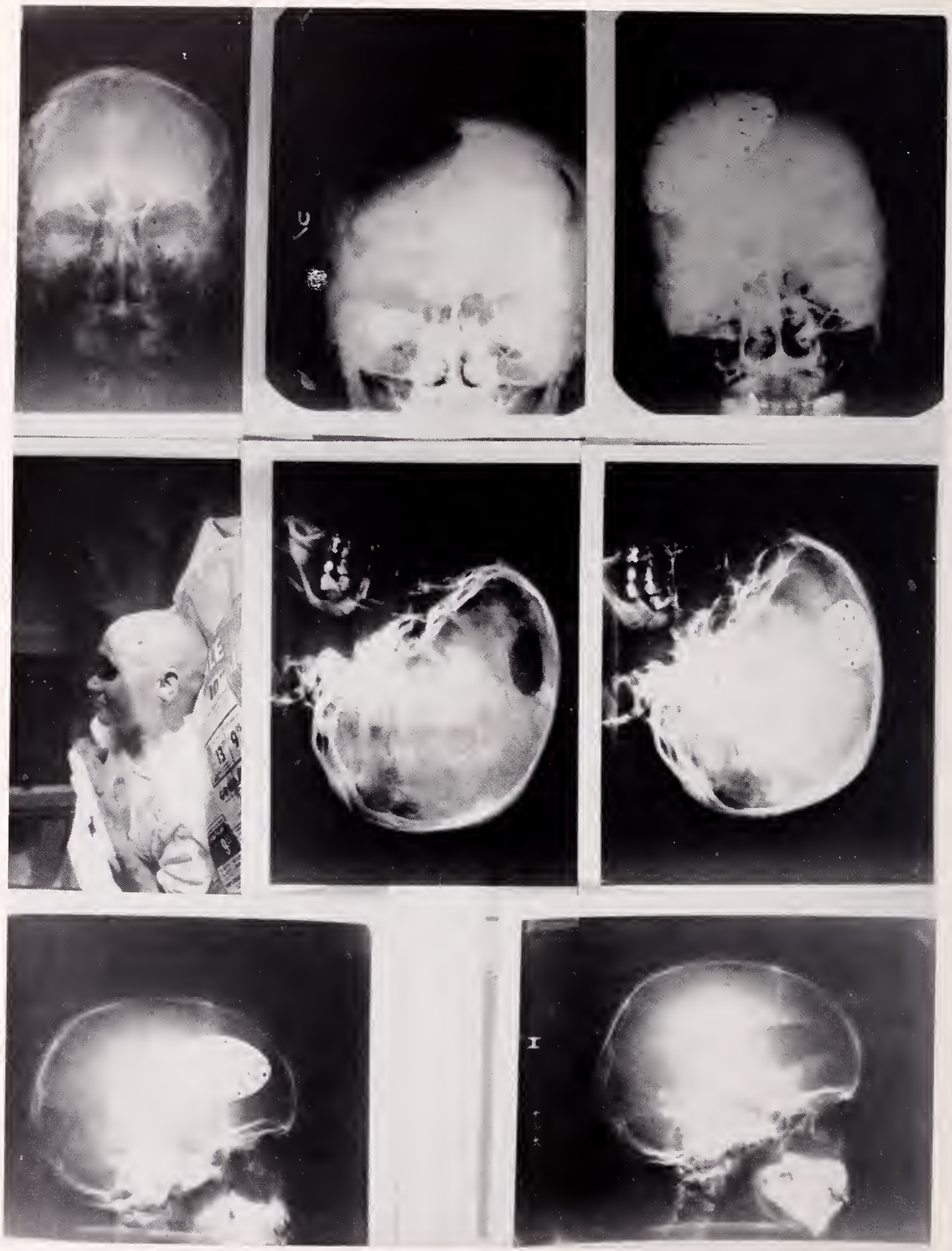

Figure 2. X-rays of skulls with injuries, holes, and platings, frontal.

made to fit and can be looped into burr holes to prevent deformity. It is now being used with greater frequency.

Reaction in the tissues is minimal in each case and morbidity in the wearer has been limited. There has been no mortality from the platings which we have done.

A careful explanation to the patient concerning the plating of his skull, and the assurance of the excellent protection provided by the plate is usually helpful, but it is also wise to tell the patient that this is not a natural tissue but is like a prosthesis, like a dental bridge or plate, and a medical help and protection when the body structure has been injured or destroyed.

Technique of Application

The tools and materials used (Figure 5) consist of a series of fine, pre-formed plates, a large wooden block, wire cutter with flat tips for grasping, tin shears, hammer, drills, screwdrivers, and vitallium screws of various lengths, all carefully sterilized.

The scalp flap is outlined on the shaved and prepared scalp so as to provide an adequate vascular base and keep the incision at least a centimeter outside of the plate edge. The scalp is stripped from the bone edges and from the dura or neomembrane of the defect. The dura is freed from the bone edges and the periosteum stripped away so that the plate will rest directly upon the bone. The plate which most accurately fits the defect is chosen and further shaped or trimmed, if necessary, to make a smooth, form-fitting on-lay. As many screws as possible are placed in the bone through the holes at the border of the plate. Occasionally, a suture is placed through the dura and tied to the center of the plate to suspend the dura. The periosteum is placed back over the plate, the galea is closed with 3-0 chromic catgut or ticron and the scalp is closed tightly with 3-0 or 4-0 black silk or ticron. A firm, elastic dressing is applied.

General endotracheal anesthesia is preferred for the operation, although some platings were done earlier under local anesthesia. If there had previously been a dirty compound wound or outright infection, we have used a prophylactic broad spectrum or specific antibiotic before and after the plating operation.

Complications

In the 35 patients, five plates have had to be removed and left out: One because of infection and a thin scalp in a patient with a previous brain abscess, enucleation of the left eye, and osteomyelitis. A second in a patient with multiple brain abscesses who later developed hydrocephalus; the third in a three-year-old child who had required replacement of a plate due to a fall and injury and then who received a third fall and injury to the site of the plate, and the skin and bone edges were inadequate for further plating. A firm neomembrane had formed under the plate, however, and the brain had been well protected by the metal in each fall.

The fourth plate was removed because of breakdown of a thin scalp in which the incision was along the scar of the original laceration at the center of the plate. In the fifth case a recurrent meningioma became malignant and grew rapidly, and the plate had to be removed.

Three plates had to be removed and replaced due to direct trauma upon them. Their resistance to a severe injury was remarkable.

The case history of one of these is as follows:

Case Report

On July 12, 1951, Michael D., an 18-month-old boy, in a car wreck, sustained a comminuted, depressed fracture of the left posterior parietal region of the skull. The neurological examination was negative except for drowsiness. X-rays of the skull showed fragmentation of the bone with probably penetration of the dura. On July 14, 1951, operation revealed several fragments of bone driven through the dura into the brain. Debridement was carried out, incomplete closure of the dura was accomplished, gelfoam-thrombin was placed over the dura, and the wound was closed. A defect was left in the bone 3.5 x 3.5 cm. Convalescence was rapid and uneventful.

On August 27, 1951, the boy was readmitted with a bulging decompression about half the size of a golf ball. On August 28, 1951, a cyst containing the fragments of gelfoam was found between the dura and the scalp. A bulging neomembrane was present over the brain where the dural defect had been, and there was no demarcation between firm dura and membrane. The smallest #1 Hoen pre-formed vitallium plate was applied and fastened to the bone by three double-hole wire sutures. A snug, smooth onlay fit was accomplished. Serum was aspirated from beneath the skin flap. The incision healed and the boy was discharged on September 9, 1951.

On October 14, 1951, the patient was readmitted, having fallen from a porch about three feet high, striking his head and the plate on a round, hard rock. Examination was neurologically normal, but there was a palpable depression in the metal plate, and its edges were turned up in a ring beneath the scalp so that one feared

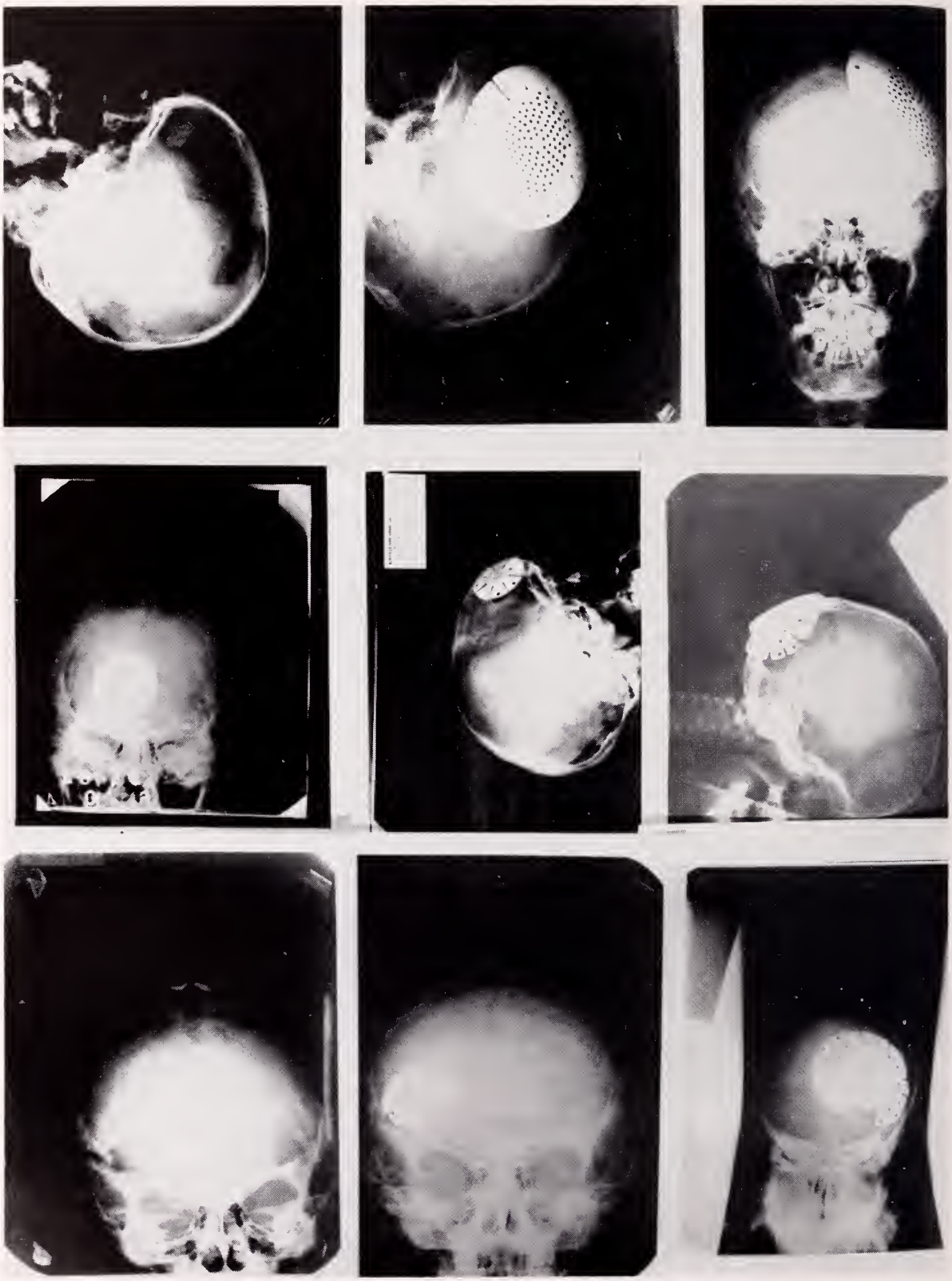

Figure 3. X-rays of skulls with larger defects and frontal and occipital defects requiring contouring.

that any other pressure or bump over the area would cause the plate to remove a circle of scalp like a biscuit cutter (Figure 1). The child was again operated upon October 19, 1951, and the depressed plate removed. One of the supporting tantalum wires had broken, but the other two were intact. A new plate of the same size was fastened in place by vitallium screws. A small clot developed beneath the skin flap over the plate. Some of the blood was partially aspirated and the rest absorbed spontaneously. Otherwise, recovery was uneventful.

On August 16, 1959, eight years later, this boy, aged 9½ years, reported having had spells of seeming blindness and a feeling of numbness. An electroencephalogram, showing no localization, indicated slight dysrhythmia. An air encephalogram showed no contractile scarring but slight cortical atrophy (Figure 1). The plate remained in place. He was given small doses of Mebroin and Phenobarbital.

On February 17, 1961, medication was reduced to Phenobarbital grains ¼ at bedtime. No seizures had occurred.

On February 5, 1968, the patient, then 18 years of age, drove all night from Florida and was in an automobile accident. He had the odor of alcohol on his breath, but he denied drinking, and although he was very slightly confused on admission, he later denied any history of seizures, or use of anti-convulsants. Two superficial scalp wounds on the top of the head were closed. X-ray of the skull was negative for fracture, and the skull plate was firmly in place and unchanged. The boy showed no neurological deficit. His wounds were dressed, and he was discharged the following morning. He has not reported since.

The sites of the skull defects in these patients included all parts of the skull except the vertex and over the great sinuses (Figures 2, 3, 4). Injured areas included the supraorbital ridges, lateral orbit, and the occipital regions, as well as the convexities.

Contouring of the plate has been satisfactory, although in some cases irregularities of the bone defect have been incompletely covered by the metal (Figure 4). All have been well protected by muscles and soft tissues.

The resultant scars from all recent plating operations have been very satisfactory since the incisions have been well wide of the plates.

Only one patient has reported a fresh laceration directly over the plate and this was promptly treated by us and healed per primum.

One boy fell on his plate and loosened one screw which had to be removed from beneath the scalp, but the plate remained in place and firmly protective and did not shift.

Our records indicate that eight of these patients had convulsive seizures, two of them having the convulsions come on some time after the plating, one following multiple trauma.

No definite relief of seizures can be noted as the result of plating in this series, although three have required less anticonvulsant medication for control of their seizures since plating. The post-traumatic cerebral syndrome has been present to a greater or lesser degree in those patients whose trauma resulted in periods of extended unconsciousness and neurological deficits. Only in those cases with pulsating skull defects or in patients with fears and anxiety can plating be credited for relief from the syndrome of the trephined or the post-traumatic cerebral syndrome. Twenty patients have replied to follow-up letters, which have asked a serious of questions concerning their life since plating, and eight more have reported verbally. Eight replied that they had bumped their heads and six plates remained unchanged. Two reported that the plate was dented, but needed no revisions. Those in whose cases plates had been removed were not questioned. Six reported some headache in hot sun or severe cold if they did not wear a hat.

Four reported temporary headaches after they bumped their heads. Only four of those reporting had had new minor seizures. All who reported had praise for the security and protection of the plate. Only two others complained of lack of contour, one whose skull fragmented beneath the plate with a new severe head injury (the plate was not the cause of the change in contour and was not removed), and a second who dented the edge of the plate requiring partial recontouring.

Three patients are known dead since plating, one from hydrocephalus and in whose case the plate was previously removed, one from a slate fall in the mines, and the third from malignant meningioma.

Discussion

The choice of materials and the manner of handling these plating problems have evolved from knowledge acquired by reading, by hearing the experiences of others, and from our own practice and observation. Reeves,[3] in his monograph, reported that in some of the primitive races in the South Sea Islands it was said that a coconut shell was inserted over a trephined defect and covered by the scalp. A gold plate to repair a cleft palate was reportedly first used

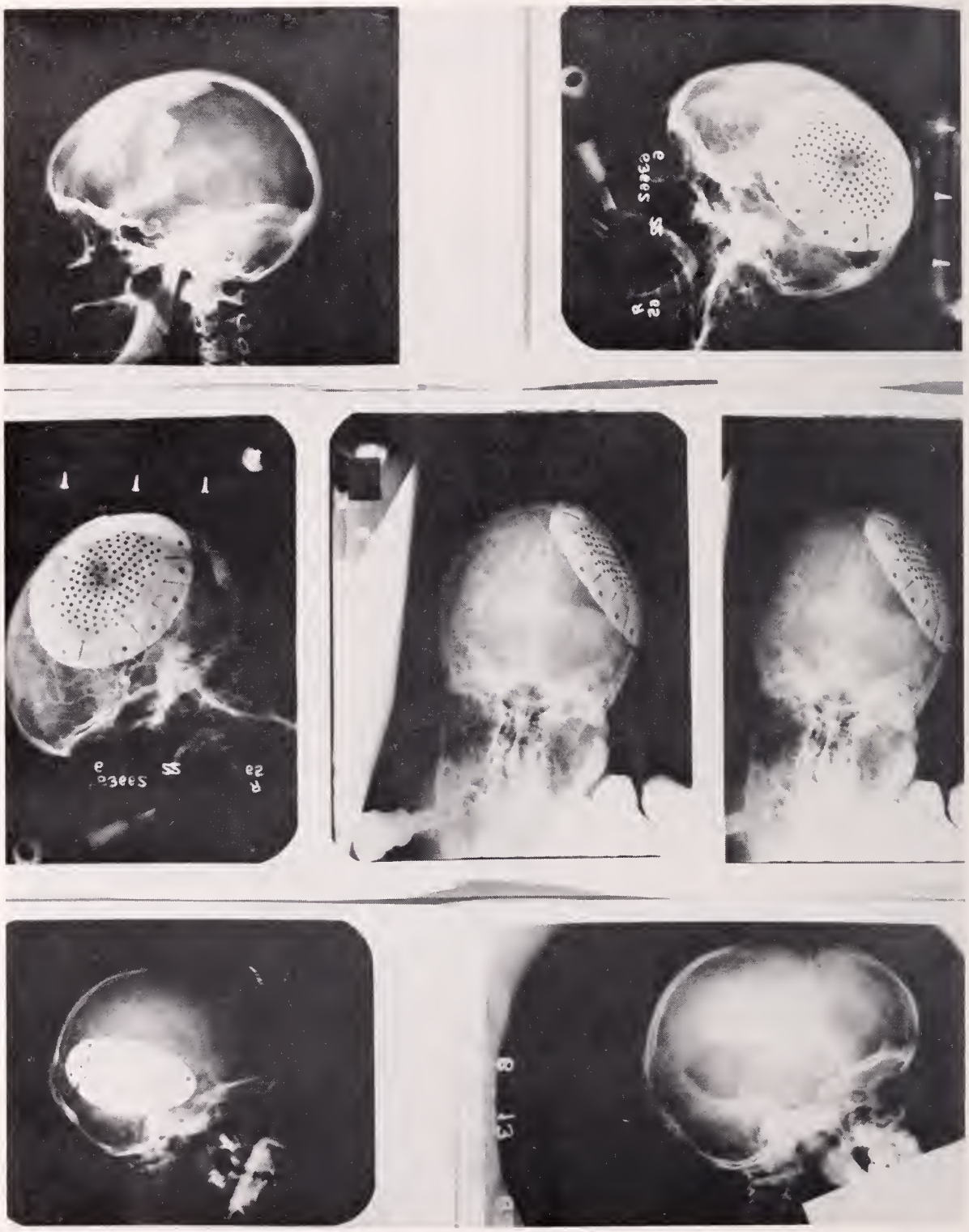

Figure 4. X-rays of large parietal and temporal defects with plating.

in 1565 by Petronius, and as early as 1600, Falopius advised replacement of uncontaminated bone, if the dura was intact, but removal of the fragments over an exposed brain and subsequent insertion of a gold plate. It is also reported that in 1670 a successful cranioplasty was performed by J. Van Meekran, who used a bone from a dog to repair the skull of a Russian. In 1821, Philip von Walther performed bone grafting in man, and experiments of bone grafting were carried out in 1859. Macewen, in 1873, replaced bone fragments treated with bichloride of Mercury. Bone from the outer table of the skull, the tibias, the ribs, the ilium, the scapula, and the sternum has been used for bone grafts. Westerman, in 1916, suggested boiling the bone for replacement. Stryder employed the novel method of storing cranial bone in the abdominal wall until it was replaced at secondary operation. Morestein, in 1915, reconstructed cranial defects with cartilage grafts, and because cartilage was easily molded and relatively resistant to infection, many surgeons throughout the world used cartilage for repairing skull defects. A number of cases of the use of boiled animal bone for cranioplasty of the human skull have been described, and even buffalo horn was reported as having been used. Despite extensive clinical use and much experimental work, however, the fate of cranial grafts with bone has never been satisfactorily decided and remains controversial.

Celluloid[3] was tried as a substance for covering cranial defects, but the tremendous connective tissue response to celluloid caused it to be given up for that purpose.

Acrylic resins or plastics have been used, and a packet for the application of methyl metacrylate in the form of a special kit has been developed. There are numerous reports of its use and some reports both of the disadvantages and advantages of this material.

Reeves[3] credits the first attempt to fill a cranial defect by means of a metal plate to De Booth and Curtiss in 1893, who used aluminum. The patient died ten days after operation. Gaerster, in 1895, reportedly devised a means of covering a skull defect with a thin gold plate, and this case was followed for two and one-half years without indication of any unfavorable reaction. One hundred cases of cranioplasty with gold plates were reported by Estor, in 1917.

Imbert and Raynal[3] recommended silver for the repair of skull defects in 1910, and this substance was used in France by neurosurgeons and by Mitchell in England, in 1917. Although it seemed relatively inert in the tissues, it was reported that there was some reaction to the oxide which formed on the silver. In 1908, lead was used in cranioplasty, and in 1918 it was again suggested that lead be used. Lead intoxication, however, developed as an obvious contraindication. In 1929, Cornioly described the use of a platinum plate which remained in place fourteen months without any sign of reaction.

Grant and Norcross,[2] in 1939, rather exhaustively reviewed the literature in the field of cranioplasty, and Venable and Stuck, in 1943, made a review from the standpoint of the use of metals in tissues. Both of these reviews showed that good results could be obtained by the use of materials other than bone for repair of body tissues.

As the result of studies by Burke,[4] in 1940, and by Carney,[5] in 1942 and 1943, tantalum became popular and has proved a very satisfactory material for plating. Extensive reports of good results with its use during and since World War II have been published.[3]

Bouldrey,[6] in 1944, advocated the use of stainless steel wire mesh, and this substance is now being used alone, and as a reinforcement for the plastics, in cranioplasties. Adelstein, in 1951, reported the use of thin stainless steel plates in 15 patients, and Scott, Wycis, and Murtagh,[7] in 1962, evaluated the use of this material in 75 patients. They reportedly prefer it to the other materials. Triconium, a wrought alloy of nickel, cobalt, chronium and molybdnum, has been recommended as a material worthy of trial for skull plating, and Donald Campbell of Australia has reported its use.

Venable and Stuck[1] reported favorably upon vitallium alloy as a metal substance which was extremely inert and well suited to the plating of fractured bone. Gibb,[7] in 1941, reviewed the substances which had been used in attempts to close skull defects up to that time and reported upon the use of vitallium metal in three patients in whom he placed vitallium which he had formed and ground to suit the cases at hand for the repair of their skull defects. Lipscomb and Grover,[9] also Peyton and Hall,[10] in 1941, and Lipscomb and Grover,[11] and Parsons,[12] in 1942, reported the use of vitallium plates for closing skull defects. Beck,[13] in 1942, reported the use of ready-made flat, long, vitallium plates 6, 10, and 14 cm. in length by 2 and 3 cm. in width to form a lattice-type repair of skull defects in four cases.

During World War II the Austenal Laboratories, in New York, in consultation with Dr. Thomas I. Hoen, produced a series of thin, firm, pre-formed, perforated, ready-made vitallium skull plates, and these have been found to be

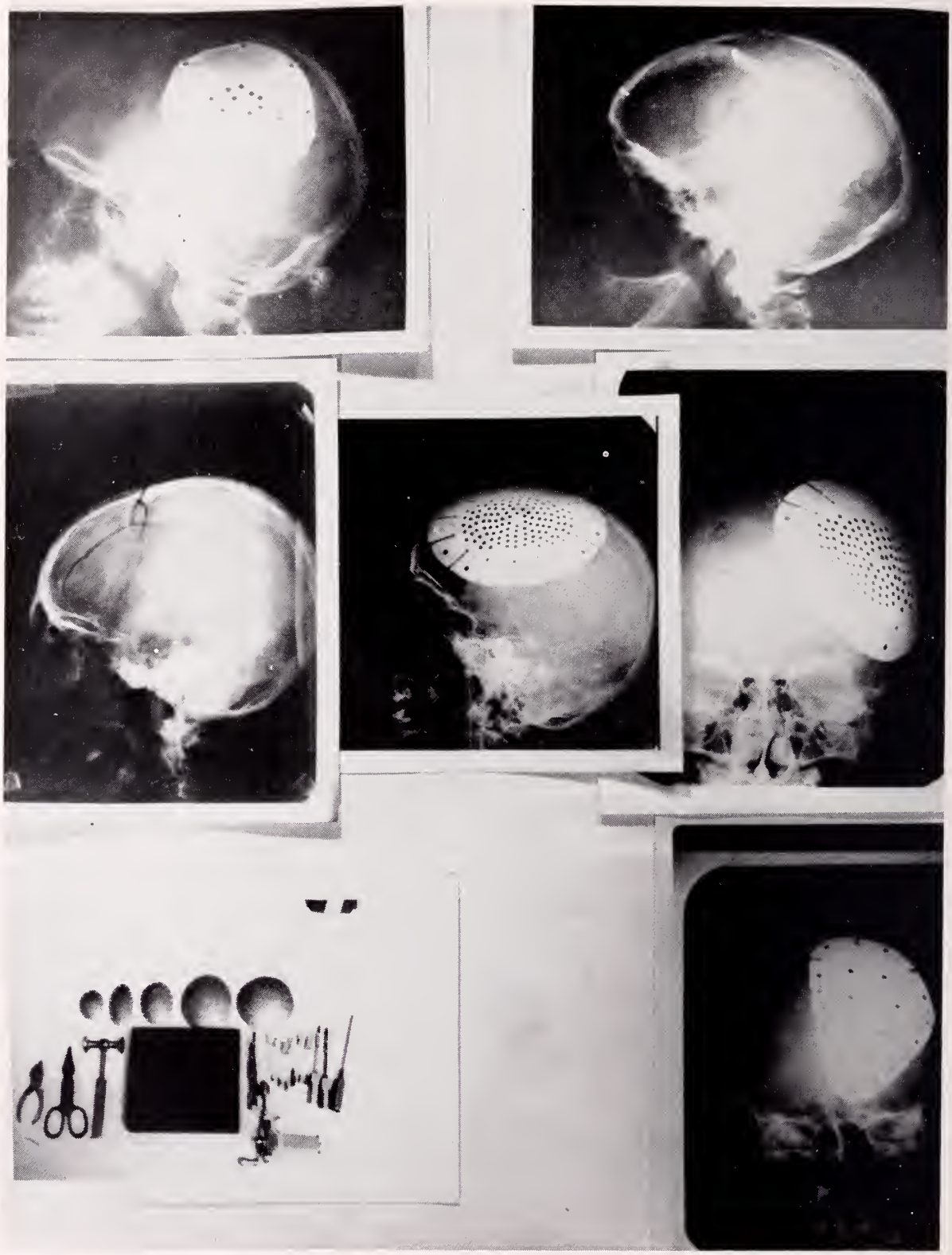

Figure 5. (a.) X-rays of frontal defects plated with stainless steel plate, wire mesh, vitallium and tantalum. (b.) Set of equipment for vitallium cranioplasty.

very satisfactory in our hands when properly applied.

At the 1961 sectional meeting of the American College of Surgeons in Philadelphia, it was stated that vitallium apparently was no longer being used for skull plating, or at least if it was, there had been no recent reports about it. Since this metal has been used in our hospital for several years, it seems justifiable to make this report. The vitallium plating has been successful and protective, and no case of erosion of the bone by the plate has been found.

Summary

In selected cases, cranioplasty is a proper and necessary part of the treatment of patients with skull defects. Several materials, including bone, plastics and metal are still used for skull repair. Many pre-formed plates are now being made available for use by the neurosurgeon. We have used pre-formed vitallium plates in the majority of our cases because of their tolerance by the patients, ready availability, ease of insertion and acceptance by the tissues.

Satisfactory contouring and excellent protection have been accomplished by this method. Insofar as can be determined, most of these plates have remained in satisfactory condition for years (one at least for as long as 19 years) unless they were disturbed by further trauma. Several of our patients seemed prone to repeated injury.

More recent use of metal mesh alone or combined with acrylic to fit the skull defect closely with an inlay has seemed to offer some advantage over the pre-formed plates. One should keep an open mind, have full knowledge of materials available, and use the plating which, in his hands, gives the best result for his patients.

References

1. Venable, C. S. & Stuck, W. C.: Electrolysis Controlling Factor in Use of Metals in Treating Fractures, J.A.M.A., III: 1349-1352, (Oct. 8) 1938.
2. Grant, F. C. & Norcross, N. C.: Repair of Cranial Defects by Cranioplasty, Ann. Surg. 110:488-512, (October) 1939.
3. Reeves, David L.: Cranioplasty, Springfield, Ill., Charles C. Thomas, 1950.
4. Burke, G. L.: Corrosion of Metals in Tissues; and Introduction to Tantalum, Canad. M.A.J. 43:125-128, (August) 1940.
5. Carney, H. M.: Experimental Study with Tantalum, Proc. Soc. Exper. Biol. and Med. 51:147-148, (October) 1942.
6. Boldrey, E. W.: Stainless Steel Wire-Mesh in the Repair of Small Cranial Defects, Ann. Surg. 121: 821-825, (June) 1945.
7. Scott, Michael, Wycis, H. & Murtagh, Frederick: Surg., Gynec. & Obst. 115:453-461, 1962.
8. Geib, F. W.: Vitallium Skull Plates, J.A.M.A. 117: 8-12 (July 5) 1941.
9. Lipscomb, W. R. & Grover, C. G.: Cast Metal Plate for Closing Defect in Skull from Comminuted Fracture, Dental Digest, (April) 1941.
10. Payton, W. T. & Hall, H. B.: The Repair of a Cranial Defect With a Vitallium Plate, Surgery 10:711-715, (November) 1941.
11. Lipscomb, W. R. & Grover, C. G.: Use of Vitallium Plate for Closing Traumatic Skull Defects, Rocky Mountain M. J. 30:288-290, (April) 1942.
12. Parsons, W. H.: Repair of Cranial Defect by Insertion of Vitallium Plate, South. Surgeon 11:840-845, 1942.
13. Beck, Claude S.: Repair of Defects in Skull by Ready-Made Vitallium Plates, J.A.M.A. 118:798-799, (March 7) 1942.

FFA-type Pilot Brief

An often reliable source reports a story circulating in Bush Alaska about a well-known, often lubricated pilot who embarked on a rescue flight to a remote Eskimo village under adverse weather conditions. Villagers heard the drone of the invisible plane passing over in the storm several times. They then noted that the continuous engine roar appeared to have stopped moving and was coming from a stationary point near the village. Donning their furs they made their way toward the sound, only to find the plane firmly embedded in a soft snow drift and almost invisible in the cloud of snow thrown out by the whirling propeller. The pilot was hunched over the stick, hand on throttle, peering out into the passing storm and totally unaware he had landed. It is reported that he required stimulants when a tapping on the side window drew his attention to several smiling Eskimo faces.—*Alaska Medicine.*

Special Article

Admissions Activities at the West Virginia University School of Medicine

David Z. Morgan, M. D., and Frank W. McKee, M. D.

Across the country, many questions are being asked about the admissions process of medical schools. The following brief summary of this activity at the West Virginia University School of Medicine has been compiled in response to the queries which we have received.

The Authors

- **David Z. Morgan, M. D., Assistant Dean; and Frank W. McKee, M. D., Dean, West Virginia University School of Medicine, Morgantown.**

Committee on Admissions

The Committee on Admissions consists of 10 faculty members and two student members under the chairmanship of Dr. James D. Martin, Associate Professor of Neurology.

In addition, nearly every faculty member assists in the interviewing of applicants from time to time and presents his evaluation of the applicant to the full committee.

Besides the weekly committee meeting and the interviews, the committee, the Dean's office and the Associate Registrar's office spend many hours in reviewing applicant files and in assembling data.

The committee is fully aware of its responsibilities and possible short-comings, and undertakes its difficult task seriously.

Applications

The number of applications to medical schools has rapidly increased in the past several years (Table 1), a trend which has been reflected in the number of applications to the West Virginia University School of Medicine.

At West Virginia University the total number of applications mailed to applicants has averaged around 1,500 each year since 1965. The lower rate of return of the application forms from non-residents is influenced largely by our clear statement to non-residents that residents of West Virginia are given preferential consideration because most of the support for our school comes directly from the taxpayers of West Virginia.

In the past five years an average of twelve non-resident applicants per year have been offered places in the first year class but have elected to enroll in other schools. Most of these residents are outstanding students who have gained acceptance to several or more schools.

Nearly one of every two West Virginia applicants has been offered a place in a class (Table 1).

The small number of non-resident admissions in the past several years is a tribute to the high quality of resident applicants.

Selection Factors

The factors which the committee considers in its deliberations are:

1. Academic achievement.
2. The Medical College Admission Test Scores.
3. Letters of recommendation.
4. The personal interview.

None of these factors is given special weight. All are important. Each will be considered in some detail.

Grades

There is no "cut-off" grade point average below which a West Virginia resident student is denied consideration and no grade point average which guarantees acceptance. The grade point average, however, is considered a significant indication of the student's capability to manage the demands of a medical education.

In fairness to the non-resident student, whose coming to Morgantown for an interview may involve a considerable loss of time and expense, there is a preliminary screening process which depends largely on academic achievement.

Evaluation of grades with respect to the college or university which the applicant attends

is made in the general context of the applicant's qualifications. Our students come from many institutions, both small and large.

The range of grade point averages in any given class is broad, but with the large number of highly qualified applicants the average is increasingly skewed toward the 3.0-4.0 range (Tables 2 and 3).

The Medical College Admissions Test (MCAT)

This test is given in May and October of each year. It is prepared by the Psychological Corporation, 304 East 45th Street, New York, New York 10017.

The test consists of four subtests. The *Verbal Ability* subtest measures vocabulary. The *Quantitative Ability* subtest measures basic mathematical skills. The *General Information* section tests overall cultural knowledge. The *Science* subtest includes chemistry, physical and the biological sciences.

The MCAT scores are used as another yardstick of academic capability. While there is no "expected" score for our applicants, display of competence is expected in each of the various components of the test. The subtest scores range from 205 to 795, based on mean subtest scores of 500.

There is usually fairly good agreement between grades and MCAT scores although there are occasional exceptions to this. Every effort is made to understand the reasons for these exceptions. An excellent academic record coupled with a mediocre MCAT performance can be the result of many factors as can the reverse of this circumstance.

The result of this test is now sent to each student. Coupled with the scaled mean score there

Table 1

NATIONALLY			WEST VIRGINIA				
			Applications Filed			First Year Students Enrolled	
Class	*Applicants*	*First Year Students*	*Resident*	*Non-Resident**	*Acceptances Offered to Residents*	*Resident*	*Non-Resident*
1961-62	14,381	8,483	110	42	58	52	8
1962-63	15,847	8,642	135	68	56	52	8
1963-64	17,668	8,482	122	127	62	50	10
1964-65	19,168	8,836	138	146	60	52	9
1965-66	18,703	8,760	125	201	62	49	12
1966	18,250	8,991	115	193	64	58	4
1967	18,724	9,473	105	181	58	47	22
1968-69	21,118	9,863	147	192	71	58	10
1969-70	24,465	10,422	179	190	87	73	2
1970-71	25,400	11,360	181	555	89	70	6
1971-72	26,000+	11,800+	211	462	87	73	3

*Prior to 1970-71, all non-resident applicants completed a preliminary application form.
+Estimated.

Table 2

West Virginia Entering First Year Class Undergraduate Grade Point Average*

	1970	1971	1972	1973	1974	1975
OVERALL	3.10	3.01	3.11	3.11	3.25	3.25
SCIENCE	3.09	3.03	3.12	3.11	3.26	3.25

*All grade point averages are exclusive of military science and physical education and are those calculated at the time of the interview.

Table 3

West Virginia First Year Class Overall Undergraduate Grade Point Average Distribution

Grade Point Average	1966	1967	1968	1969	1970	1971
2.0 - 2.4*	6%	7%	4%	7%	3%	5%
2.5 - 2.9	37%	45%	43%	25%	24%	20%
3.0 - 3.4	42%	39%	32%	52%	37%	41%
3.5 - 4.0	15%	9%	21%	16%	36%	34%
	100%	100%	100%	100%	100%	100%

*Includes two students whose overall grade point averages were below 2.0.

Scaled Score	505	545	595	495
Percentile Band	41±9	44±10	62±13	29±13
	Verbal Ability	Quan. Ability	General Information	Science

is a percentile band reported. An example may help to explain this:

This student's scaled score in general information based on a mean of 500 is 595. His percentile band is 62 ± 13. This means that if his "true" score could be determined the chances are two out of three that he outperformed 49-75 per cent of the current examinees.

Students often ask if they should repeat the MCAT. Our experience has been that the retakes usually do not result in significantly different scores, but again there are exceptions to this statement. If illness, fatigue, other examinations, etc., intervened at the first examination, a retake may be desirable.

Table 4 shows the Medical College Admission Test mean scaled scores for accepted first year students at West Virginia University since 1966.

Letters of Recommendation

The Committee on Admissions is particularily interested in the evaluation of the applicant made by undergraduate advisors and instructors or others who have had the opportunity to know him well and to observe his character and the thoroughness, industry and discipline with which he works.

Letters from casual acquaintances of the applicant usually do not enhance admissibility.

A personal essay by the applicant, submitted with the application, is carefully read because it allows the student to bring to the attention of the Committee on Admissions those personal factors which he feels may have a bearing on the application.

Health Questionnaire

Good health and physical stamina are essential to carry out the responsibilities of medical education and subsequent postgraduate training and medical practice. The short health questionnaire required in the application process provides assurance of general fitness for the demands inherent in medical professional activities.

The Interview

A member of the Committee on Admissions usually pairs with another faculty member for the interview. All West Virginia residents are invited for an interview.

The interview is not an inquisition. It is an attempt to add some insight into those personal qualities and character traits of the individual which would fit him or her to be a good physician. It also provides the applicant with an opportunity to ask pertinent questions which concern him.

Interviewers vary somewhat in their approach. At times, seemingly irrelevant questions may be asked in an effort to assess the applicant's ability to think and to respond to questions for which he has not prepared an answer.

The Selection Process

Applications for the class entering the fall semester of the following year are accepted from June 1 to December 1. Interviews begin shortly after the early processing of applications.

It is the responsibility of the applicant, and clearly to his advantage, to ensure the completeness of his records early in the interview period. Absence of any of the essential credentials—official transcripts, letter of recommendation, MCAT scores or health questionnaire—will delay final consideration of the applicant by the committee. For this reason, the Committee on Admissions strongly recommends that the Medical College Admission Test be taken no later than May of the year in which application is made.

At the time of the interview, volunteer members of the student body will guide the applicant

Table 4
West Virginia First Year Class Mean MCAT Scores

	1966	1967	1968	1969	1970	1971
VERBAL ABILITY	508	528	508	513	529	525
QUANTITATIVE ABILITY	533	527	554	559	575	584
GENERAL INFORMATION	533	550	541	530	542	537
SCIENCE	507	528	541	525	532	544
OVERALL MEAN	520	533	536	532	542	548

on a tour of the Medical Center and will discuss any questions he may have.

Following the interview, the interviewers present all data and impressions gained of the candidate to the full committee. A decision may be made to accept or not accept the student at this time, or to hold the application for later reconsideration. The student is notified by mail at the time final action is taken.

Alternates

After all of the established places in a given class are assigned by the Committee on Admissions, a list of alternate candidates is prepared from the remaining qualified applicants. These candidates are informed of their alternate status by letter from the Committee on Admissions. Whenever a vacancy in an established place occurs, the committee reviews the list of alternates and selects a suitable replacement. This action is reported immediately to the selected individual. The alternate list is not discarded until the academic year has started and the class has fully assembled.

Summary

A brief summary of admissions activity of the West Virginia University School of Medicine has been presented together with a statistical profile of classes since 1966.

It must be emphasized that there is no one perfect way to select a first-year class from among a large group of aspirants, otherwise every school would do it the same way.

At the West Virginia University School of Medicine the appraisal of applicants is a methodical, but very personal process.

Acknowledgments

Former Dean Clark K. Sleeth and Mr. Lyle E. Herod, Associate Registrar, assisted in providing some of the statistical information.

Mrs. Isabel Price and Mrs. Sharron Stephens gave valuable help in preparing the manuscript.

To Physicians in Training

To all physicians in training and especially West Virginia residents. West Virginia is in need of physicians in all categories for rural and urban practice. Any physician desiring information concerning openings in the State can communicate with *The Journal*. *The Journal* will publish free for 6 issues pertinent information concerning any qualified physician who is seeking a location in West Virginia. Single copies of *The Journal* listing practice opportunities will be mailed to physicians upon request.

A roster containing a list of officers of county societies and specialty sections of the West Virginia State Medical Association is available upon request to the headquarters offices. Also, information pertaining to West Virginia licensing laws will be mailed to interested physicians. Interested parties may then write the officers of component societies or sections for further information.

Any other information about West Virginia will be secured from outside sources, if possible, and sent upon request. All letters to *The Journal* will receive individual immediate attention.

Special Article

Visiting Physician Continuing Education Program

Thomas H. Covey, Jr., M. D.

PHYSICIANS in rural communities are rather isolated from academic centers, overworked, and find it extremely difficult in many instances to keep up with the various aspects of an ever-expanding modern medicine. They find it extremely hard to leave their practices to attend medical meetings and conferences, and frequently have inadequate communication with larger medical centers. Since these doctors are the leaders in the local health team, a logical step in improving general medical care would be in helping them continue their medical education. While it is clear that many problems will have to be referred to a medical center for specialized care for a short period of time, the patient's long-term management must be within his community. Since there is a shortage of skilled specialists and allied health professionals in many areas, a program designed to both broaden these physicians' education, and improve their communication with a larger center, could markedly improve their effectiveness.

Based on the theory that learning must be an active process and not passive, a program was designed around the community and its problems. The basic plan includes a coordinator who should sit down with his fellow physicians and evaluate the local medical situation and its needs. He would then plan the program in a way unique to his situation and select a particular area of medical interest to share with a visiting physician. There are several programs throughout the United States designed, basically, as the "visiting professor program"—some have used resident physicians, and some faculty. In the military services, various specialty consultants are used in similar fashion. Larger medical centers frequently invite authorities as guests for two or three-day sessions to discuss various problems. These variations of this educational system have uniformly shown the positive results of sharing the experience taking place in the local hospital setting.

Method

At West Virginia University, therefore, a program was designed following the outline of the San Francisco Medical Center Continuing Education Department as it was felt it might apply to rural West Virginia. The Regional Medical Program area liaison officers play an important role in the function of the program. These men are familiar with the health care in communities throughout the state. They explain our program to the local physicians and help them evaluate their situation and determine the type of medical specialist that might be most beneficial to them.

After evaluating the needs of the local physicians, an appropriate physician from the West Virginia University Medical Center faculty or residency staff will be selected to spend two to three days in the community hospital helping carry out the pre-designed program of the local physicians. Careful pre-planning is necessary so that all concerned can make the best possible use of the visit.

It is hoped that at the local level a combination of formal lectures, patient rounds, specialized clinics and general discussion will be used to show the visiting physician problems encountered on a local level and to give him an opportunity to apply his skills in the various aspects of community medicine. As a part of the activities, entertainment should not be neglected, whether it be on the golf course, or at dinner, as this creates a relaxed atmosphere that, hopefully, will generate a relationship that should lead to better communications on medical problems in the future. Following the visit, an evaluation will be requested from both parties. Hopefully one or two more such meetings would then be organized to follow in two to three-month intervals. It is hoped that subsequent visits might be more relaxed and accomplish even more medical exchange.

The Author

- **Thomas H. Covey, Jr., M. D., Assistant Professor of Surgery, West Virginia University School of Medicine, and Physician Consultant, West Virginia Regional Medical Program, Morgantown.**

Progress

So far four single visits have been completed, one by a urology resident, two by faculty internists and the fourth by a faculty pediatrician. From the evaluations of these meetings, the visiting doctor was well received and both the educational and social aspects of the meeting were a success. All who participated were eager to maintain and extend the program. All communities involved requested that the physicians return for subsequent visits. From the evaluations of these visits, it becomes apparent that this technique can offer an excellent source for self-evaluation of the medical center, thus improving its delivery of medical care and possibly modifying the approach to medical education within the University. It also becomes apparent that the visitor learns as much from the experience as does the local participant. These two men are colleagues—each specialized in his own way, and the sharing experience has served to broaden both their educations.

Comment

The success of this program will depend on (1) thorough planning at the community level, (2) careful selection of a specialist appropriate to the needs of that medical community and (3) close coordination between the two factions in preparing for the visit. Local responsibility can be most effective when one individual acts as liaison, with various members of that medical community making the arrangements for the visit. It appears that one major obstacle will be in finding enough visitors to fill applications for the program once it becomes established. This might well be done using other institutions as well as West Virginia University. It is anticipated that some of the larger communities may follow this example and seek outside help on their own.

The program has many possibilities for expansion, not only by involving more medical specialties, but other allied health professionals as well. Advance scheduling after the program is well established is also desirable so that visits will coincide with county medical society meetings and other local functions. It appears advisable to have backup visiting physicians in case of unavoidable cancellations and last minute schedule changes, and it is best for only one man to go to a community at a given time. At present it does not seem feasible for highly specialized areas, such as ophthalmology and neurosurgery, to be represented in our program. These areas may be worked in for similar programs for larger hospitals in the state, however. Since this form of education is done in a small group situation, it must be offered on a small scale at present. It is anticipated that West Virginia University can sponsor approximately 10 such series each year. Further expansion, as previously mentioned, will undoubtedly require utilization of other institutions.

Summary

The program of continuing education for physicians in West Virginia has been described. It is felt that the visiting professor concept offers a unique method of helping the local community improve medical care through on-the-job training and sharing of medical experiences. This serves as an excellent means of self-evaluation for the community as well as the University Medical Center; and it is felt that through this program, both may improve the quality of their medical care.

References

1. "Physicians-in-Residence," a review of a demonstration project in continuing education, U. S. Department of Health, Education and Welfare.
2. Robertson, George, M. D., "Guest Residency Program," a paper prepared for Regional Medical Program workshops.

Conceit may puff a man up, but never prop him up.

RUSKIN

Electrocardiogram of the Month

Pseudo-Mitral Stenosis

Donald K. Chung, M. D., and Edward K. Chung, M. D.

FIGURE 1 was a routine admission electrocardiogram recorded from a 56-year-old man in November, 1970. His weight was 132 pounds and blood pressure was 130/70. He was on digitalis. With this limited clinical information, the following interpretation was made by an electrocardiographer.

(1) Atrial fibrillation with a moderate ventricular response.

The Authors

- **Donald K. Chung, M. D., Cardiologist, Veterans Administration Hospital, Clarksburg, and Assistant Professor of Medicine, West Virginia University Medical Center, Morgantown; and Edward K. Chung, M. D., Professor of Medicine and Director, Electrocardiographic Laboratory, West Virginia University Medical Center.**

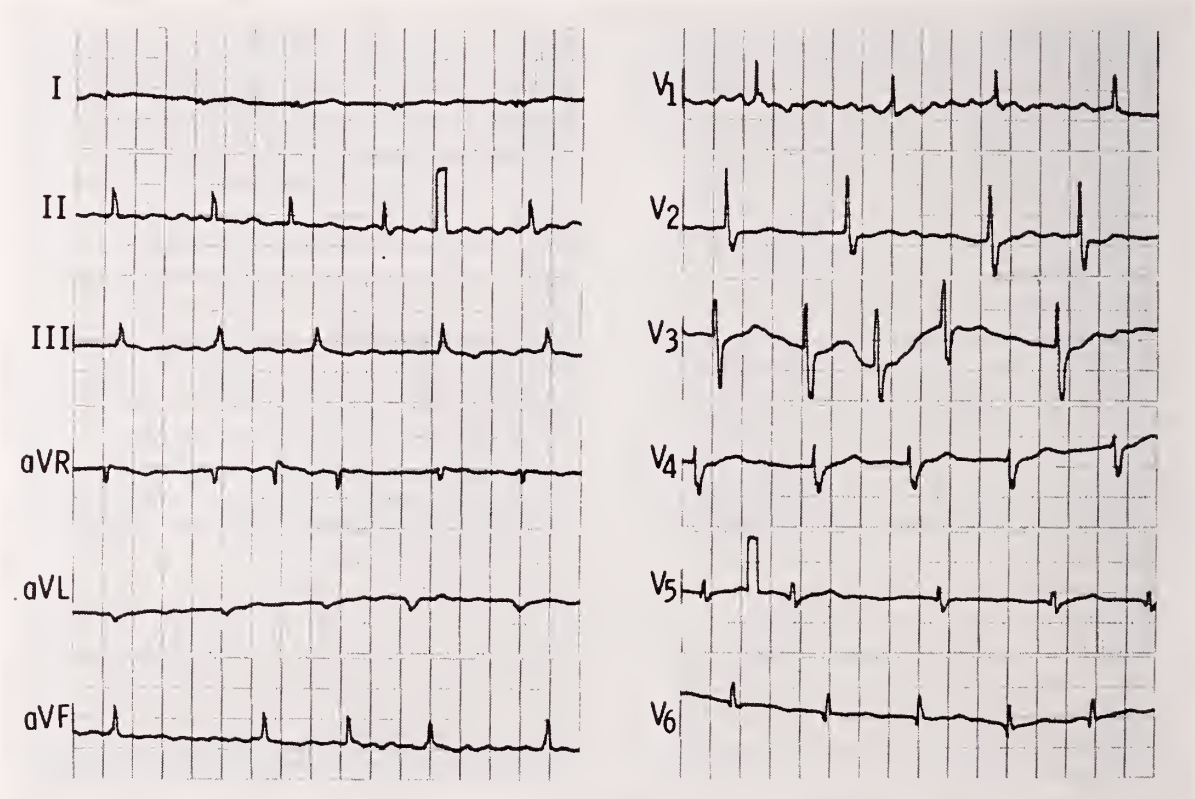

Figure 1

(2) Right ventricular hypertrophy.

(3) Coarse atrial fibrillation suggestive of left atrial enlargement.

(4) Nonspecific abnormalities of ST-T waves and/or digitalis effect.

Right ventricular hyperthrophy was diagnosed on the basis of the tendency to right axis deviation (mean QRS axis: + 90°,) and a tall R wave in lead V_1. Left atrial enlargement was also suggested on the basis of coarse fibrillation waves measuring more than 1 mm. in amplitude.

These electrocardiographic findings are compatible with advanced mitral stenosis manifesting left atrial hypertension, pulmonary hypertension and right ventricular hypertrophy.

Clinically, however, there was neither mitral stenosis nor right ventricular enlargement. Subsequently, the following clinical information was obtained.

Case History

This 56-year-old man was first admitted to the hospital in July, 1967, because of chest pain of four hours in duration. A SGOT and LDH were significantly elevated and serial EKG showed a broad and wide Q wave in leads I and aVL (pseudo-right axis deviation) and tall R wave in Vl. A diagnosis of acute postero-lateral myocardial infarction was established (not shown here). In December, 1968, a transvenous permanent demand pacemaker was implanted because of few bouts of Adams-Stokes syndrome due to sino-atrial block. The pre-set pacemaker rate was 60 per minute (escape interval: 1 second). Two months later, this patient developed atrial fibrillation which has persisted since then (Figure 1). No pacemaker activity is seen in Figure 1 because none of the R-R intervals of spontaneous beats exceed the pacemaker escape interval. Thus electrocardiographic abnormalities in Figure 1 represent old postero-lateral Myocardial infarction.

Comment

It is apparent that old myocardial infarction pattern such as seen in this case manifested a pseudo-electrocardiographic finding of an advanced mitral stenosis. It is not uncommon that abnormal Q waves due to myocardial infarction may become much smaller or even disappear when infarction becomes old. This communication therefore emphasizes the fact that the electrocardiogram is a laboratory test only. Therefore abnormal electrocardiographic tracings must always be interpreted in considering entire clinical pictures; moreover, it should never be the sole basis for judging the patient's cardiac status. Ideally, the person best qualified to interpret the electrocardiogram is the physician who is taking care of that particular patient.

Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (not onion skin or flimsy), standard letter sized (8½ by 11 in.) white paper. Wide margins (at least 1¼ in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Authors are requested to submit a carbon copy with the original or retain same in the event the manuscript is lost in transmittal.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for cuts should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it. The author will bear the cost of all over two one-column halftone cuts.

All scientific material appearing in *The Journal* is reviewed by the Editorial Board. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 1031, Charleston, W. Va. 25324.

come together!

To the 25th AMA Clinical Convention in New Orleans. Participation will be the key at this medical meeting -- you and your colleagues getting together for a useful and rewarding learning experience. Evaluating and discussing the problems of clinical medicine.

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Plan to be there. See the complete scientific program and registration forms in the October 18th issue of JAMA.

25th
AMA Clinical Convention
November 28 - December 1, 1971
the Rivergate
Convention Center
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THE WEST VIRGINIA STATE MEDICAL ASSOCIATION
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THE WEST VIRGINIA TUBERCULOSIS AND RESPIRATORY DISEASE ASSOCIATION
and
THE WEST VIRGINIA UNIVERSITY MEDICAL CENTER

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"The Fifth Annual Mid-Winter Conference On Chest Diseases"

(New Developments in Lung Diseases)

at the

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Charleston, West Virginia

Sunday, January 30, 1972
10 A. M. to 4 P. M.

PROGRAM will cover care of the tuberculosis patient in a general hospital; drug management of tuberculosis; training programs in emergency treatment of acute respiratory diseases; the role of a respiratory intensive care unit, and the value of lung scans in clinical medicine.

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PROGRAM CO-CHAIRMEN: Ralph H. Nestmann, M. D., and Joseph T. Skaggs, M. D., both of Charleston.

REGISTRATION FEE: A fee of $10 will be charged all registrants except nurses, medical students, interns and residents. Fee will include admission to group luncheon. Advance registration is requested. Please make checks payable to "WEST VIRGINIA STATE MEDICAL ASSOCIATION."

ACCREDITATION: Attendance at course will be acceptable for credit toward "The Physician's Recognition Award" of the American Medical Association. Application is being made to the American Academy of General Practice for accreditation.

OVERNIGIIT ACCOMMODATIONS: Physicians wishing to spend the night in Charleston should communicate directly with the reservation manager of the hotel or motel where they wish to stay.

FOR ADVANCE REGISTRATION, please complete the form below and mail to: WEST VIRGINIA STATE MEDICAL ASSOCIATION, POST OFFICE BOX 1031, CHARLESTON, WEST VIRGINIA 25324.

Please register me for the Fifth Annual Mid-Winter Conference on Chest Diseases in Charleston on Sunday, January 30, 1972. My $10.00 registration fee is (is not) enclosed.

Name (please print) _____ *Specialty* _____

Address _____ *City* _____

A message from . . .

The President

'FRIDAY NIGHT HEROES'

LAST year, there occurred at Huntington one of the most horrible tragedies in this State, where tragedy is legend. Three members of this Association died in support of the Marshall University football team.

This country is sports oriented. Every weekend, high schools and colleges throughout the State send their stalwarts forward to do battle on the turf. We cannot reflect philosophically on the necessity of this. We accept it as part of our way of life.

At these contests sit many of our members as team physicians—rendering a public service of considerable import. The minimizing of sports injuries and caring for the players are real services to the public. To these physicians, I doff my hat. You are our "Friday Night Heroes."

In these times when some worry about our image, you play a worthwhile role. You are to be applauded, because your efforts reflect on the medical profession as a whole.

I would like to suggest that for whatever reasons you do this, that you include two more. One, dedication to our lost comrades and, two, a rededication to our youth. This, I feel, will help repel November's cold wind and rain and leave you with a warmth of spirit few men can explain.

Harry S. Weeks, Jr. M.D.

HARRY S. WEEKS, JR., M. D., *President*

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EDITORIALS

THE DRUG PROBLEM

From all indications the government approach to the drug problem is to be based primarily on treatment and rehabilitation. These functions are, of course, medically oriented and the medical profession has a proper and legitimate role in planning and organizing any new programs or treatment modalities. The AMA has, accordingly, been cooperating fully with the President's Special Action Office for Drug Abuse Prevention.

As a profession, however, and as members of an organization we accepted President Nixon's charge to the AMA in Atlantic City to bring an end to this problem. We did not merely agree to treat the ravaged end products of drug abuse. Such a limited approach would be not only narrow but by reason of its narrowness would also carry with it certain possibilities of contributing to the drug problem. At least, to over-emphasize treatment and rehabilitation to the neglect of prevention is to give the impression that we accept drug abuse as inevitable.

Further, to organize and set up an enormous treatment and rehabilitation apparatus is to invite and to encourage its use, perhaps, by those not currently in need of such services and who, in the absence of such services, might have an additional reason to avoid drug abuse.

Another factor to be considered is that an endlessly repeated concern about rehabilitation directs attention and status to the drug user, tragically lending him a pathetic prestige through the weakness of drug use.

A parallel example might be the manner in which the welfare apparatus encourages poverty. One way this happens is that in their attempts to grant dignity to welfare recipients, welfare workers have succeeded in removing shame from being on the dole and in an abjectly dependent situation. Welfare is now a *right* and many are now proudly and militantly on the dole. It is difficult to argue with this approach to welfare but the resultant problem does exist. To produce a similar problem with drug abuse would be tragic.

Unfortunately, there is already a certain glamour, a certain dashing, romantic, daring and adventurous charisma attached to drug use and drug users. Currently it is terribly mortifying and embarrassing for a teenager to be caught without "problems." To be in such a condition is like to be unaware or not to care about "things." And, baby, that's square. How can one be relevant to the times and be committed, or how can one be involved and have a sense of fulfillment, or even have meaningful experiences without "problems?" To be with it, man, you've got to suffer. You've got to show you suffer. You've got to suffer in a grand manner. And what better way is there to demonstrate the fact that you, too, have "problems" than to use drugs?

Many sorts of people take drugs and for many different reasons. These same types of people and many of the same reasons have been with us for decades, perhaps hundreds of years. It is noteworthy that only recently have we had a pandemic of drug abuse.

Suppliers of illegal drugs are, of course, ugly people, moral descendants of slave traders. It is unlikely, though, that the world has developed a proportionately greater supply of these ugly people to account for the magnitude of our present drug problem. It is much more likely that the demand for illicit drugs has simply increased. Demand for any commodity always precedes the supply.

Identification of the source of the increased demand is perhaps the real key to a solution of the drug problem. Unfortunately, when this subject is raised for discussion, a series of neatly-packaged platitudinous explanations are trotted out in the face of which logical discussion is impossible. The plausibility of explanations such as Viet Nam, racism, social problems and poverty are only apparent. Facts such as that we have always had wars and they have never been popular, that we have had racial disharmony and discrimination somewhat worse in the past than at present, that social problems only slightly different than those at present have been written about as far back as we have had writers, that the poor have always been with us only poorer, are too easily dismissed.

It is quite apparent that we are dealing with a new phenomenon or group of phenomena which must be regarded as responsible for the increased demand for drugs. Among the host of technological wonders which have been most influential in effecting major changes in the world, those most responsible for accelerated social change are in the fields of communication and travel.

Not too long ago social change, movements of one sort or another or causes were isolated fairly well to one region for extended periods of time. This is no longer true. What happens anywhere in the world today can be seen in your living room tonight. What intrigues or fascinates you tonight on your TV set you may experience with all of your senses tomorrow by boarding a jet the first thing in the morning.

This is certainly not all bad but one result of it is that causes, movements and even fads very quickly become national and international in scope, no matter the place of origin. As a result, demagogues and rabble rousers as well as wise men have a tremendously expanded range of influence.

The universality of the "drug culture" can be accounted for in this manner. Drug use is popular in Central City for no other reason than drug use is popular and the "in thing" in the big city. It's what the other kids are doing. The other kids are also interested in ecology and they wear embroidered, bell-bottomed blue jeans, funny-looking glasses, long hair and sandals. Correspondingly, if it were the "in thing" to ridicule and loathe drug use in the big city, this too would quickly spread.

It makes sense to attempt to stop the supply of drugs by a variety of techniques and interdicting measures if for no other reason than to discourage the casual importer and dealer. Measures such as these have been in force for some years now and, it must be admitted, available evidence suggests such a disheartening degree of inefficiency as to preclude the assignment of any major new responsibility to this effort in any new approach to the problem.

The solution to the problem of reducing demand is simply to deglamorize the use of drugs. What is required is an educational and advertising campaign equivalent to that carried on by the federal government and the communications media against the use of tobacco. The target in this case is one much easier to indict than tobacco. Although outside the sphere of medical competence, such an effort can be supplied with all the factual information required from medical knowledge, medical experience and statistics, and individual case histories.

It is an easily demonstrable fact that drug use is anything but glamorous. Drug users are not romantic heroes. Rather than heroic figures, those to whom drug use is most appealing most often are ineffective and inadequate even before starting on drugs. Drug use is no shortcut to sophisticated adulthood. Drug users are basically frauds seeking to hide awareness of their total inadequacy to deal with normal anxieties arising from the inevitable maturing process everyone must endure. It is a fact that reliance on drugs does stop the maturing process, producing that most pathetic caricature of an adult, the adult child.

We have accepted President Nixon's charge to do something about the drug problem. We should do our part but we should insist that a complete job be done. Potential drug users can be vectored away from the start of drug use. In the absence of a serious effort at drug use prevention, rehabilitation of drug users could be a never ending task.

Organized medicine is generally in favor of peer review. It is hard to see how surgical skills in the operating room can be evaluated except by another surgeon, and no one wants a colleague breathing down his neck at the operating table. Most of us are uncomfortable at having someone evaluate our performance. One thinks of principals and department heads entering a classroom and watching the teacher teach. Peer review is not the favorite occupation of any of us, whether we are being reviewed or whether we are passing judgment on a colleague.

PEER REVIEW NOT A PANACEA

But we can hardly oppose it, since the alternative is to invite review by those who are not our peers. Anyway, it is probable that a sense of accountability to our brethren will do us all good. But let it be remembered that it is not a panacea. Much of medicine is involved in interpersonal relations, rapport, and charisma—in what is conventionally called the "art" as distinct from the "science" of our work. That's no more measurable than the beauty in a painting or a symphony. Much peer review, anyway, has to be *post facto*. So while it is a healthy movement, and we can welcome it, let us not oversell it as the answer to every patient's prayer. It really can't be *that* effective.—*The Journal of the Medical Society of New Jersey.*

Plans were made and construction started on the 522-bed University Hospital in the middle 1950's. An intensive care unit was not included in its construction, because at that time such a unit was still an innovation in the medical field. This picture has now entirely changed and an intensive care unit presently plays a very important part in the functions of a modern hospital. In past years approximately 50 per cent of the area originally planned for post-anesthesia recovery had to be used for the intensive care of patients.

NEW INTENSIVE CARE UNIT AT WVU HOSPITAL

The Director of the University Hospital and the Provost of the Health Sciences attempted for some time to secure funds for construction of a modern intensive care unit. Recently, sufficient funds from various sources have been procured which has made it possible to build the unit. Construction started January, 1971, and it is estimated that the cost will be approximately 1.6 million dollars. The addition will be made on the inside of the east wing of the Hospital adjacent to the present emergency unit and will comprise four stories. The first floor will allow expansion of the outpatient clinic; the second floor will make it possible to increase the radiological facilities; the third floor will contain the intensive care unit; and the fourth floor is designed for the physical plant, that is, maintenance and storage. The intensive care unit will contain 16 beds, and although the number of hospital beds will not be increased, the space of the emergency clinic will be increased twofold. This is an important consideration because the present unit has become too crowded for the services it is now called upon to render.

The intensive care unit is carefully designed including modern monitoring systems and every attempt has been made in its construction to facilitate the work of the highly specialized staff who are called upon to serve this important area of the hospital. In essence, the new intensive care unit will indeed be a tremendous functional asset to the University Hospital, as the seriously ill patient referred there will benefit in that he will receive the best possible care.

Flammable Fabrics

More than 150,000 persons are burned each year in this country due to clothing fires. Children and older people are the most frequent victims. Females of course predominate because ruffles and lightweight fabrics are a significant hazard.

Weight and weave of material determines how easily it will catch fire and how fast it will burn. Tightly woven, heavy fabrics will burn more slowly than loosely woven light fabrics of the same material.

Surface texture influences flammability. Fabrics with long, loose, fluffy pile or "brushed" nap will ignite more quickly than fabrics with a hard tight surface. The fluffy type of fabric may seem warm and "cute" for infant wear but should be avoided.

There is an order of inflammability in fabrics worth remembering.

Modacrylic is a new synthetic fabric designed to be naturally flame retardant. Glass fiber is naturally flame resistant. Wool is comparativly flame resistant and if ignited it burns very slowly and often extinguishes itself.

Nylon, polyester, acrylic, and such fabrics are only moderately flammable, but once ignited offer further dangers because of melting and dripping of the hot substance. Silk is not very flammable but often made nonflammable by addition of other materials to alter color, weight, or wearing quality.

Cotton, linen, and paper are highly flammable but can be made flame retardant by chemical treatment.

Rayon, acetate, and triacetate are as flammable as cotton but can be made flame retardant by chemical treatment.—*New York State Journal of Medicine.*

GENERAL NEWS

Doctor Weeks Asks Rural Help To Meet 'People Problems'

Dr. Harry S. Weeks, Jr., of Wheeling told those attending the 24th Annual Rural Health Conference at Jackson's Mill in September that "we have a lot of 'people problems,' and we need the help of people like you to solve them."

Doctor Weeks extended a welcome to the Conference participants as President of the West Virginia State Medical Association, which sponsors the annual session under auspices of its Rural Health Committee. More than 225 persons attended.

Dr. Martha Jane Coyner of Harrisville, Chairman of the Rural Health Committee, presided at the forenoon and afternoon meetings. Again cooperating with the Medical Association in arranging the program were the West Virginia Home Demonstration Council; the West Virginia Farm Bureau; the West Virginia Department of Health, and West Virginia University's Cooperative Extension Service.

Doctors Face Social Problems

In a general outline of Medical Association goals in the coming year, Doctor Weeks said that "many of the problems with which doctors must cope are social problems for which the proper answers have not been found."

He emphasized a continued need for better education programs of all kinds in public health, including the field of nutrition; and stressed that "the people need to be told how to take care of themselves, and when and how to seek the care of the medical profession."

The Medical Association President said that "we are starting to see some light" in efforts to increase rural health manpower, but conceded that "we still are handicapped by problems of economics and geography."

He also pointed to the Association's closer relationships with the West Virginia University School of Medicine, and noted progress in encouraging young physicians to remain in West Virginia.

Doctor Weeks suggested that additional public education efforts in the fight against drug abuse should break the problem into two categories: "that centered about so-called hard narcotics which represent an international problem; and such things as glue-sniffing that constitute more of a fad."

He suggested that efforts be made to apply the basic economic law of supply and demand to the drug abuse dilemma. "There might be little we can do about the supply," Doctor Weeks said, "but we can do something about the demand."

Other Conference Speakers

Three members of the West Virginia Department of Health staff addressed the Conference, including Mr. Ralph Yobp, who recently assumed Project Director responsibilities in the Bureau for Tuberculosis Control.

The 24th Annual Rural Health Conference at Jackson's Mill in late September provided an interesting array of speakers. In the left photo, David O. Quinn of Morgantown, State Extension Program Leader for the Safe Use of Pesticides and Chemicals (left), and Ralph Yobp, Project Director in the West Virginia Department of Health's Bureau of Tuberculosis Control, are ready to field questions from the audience. In the center photo is Mrs. Jane D. Alderman, Health Planning Specialist in the State Office of Comprehensive Health Planning in Charleston, who spoke on a project in the mental health area. In the photo at right, Ronald G. Bryant (left) of Charleston, Public Health Advisor in the State Department of Health's Bureau of Venereal Disease Control, and William R. Swecker, Charleston, Project Director for the Health Department's Family Planning Project, pose with Dr. Martha Jane Coyner prior to the forenoon Conference session. Doctor Coyner, of Harrisville, is Chairman of the West Virginia State Medical Association's Rural Health Committee, and she presided at the Conference.

Mr. Ronald G. Bryant, Public Health Advisor in the Department's Bureau of Venereal Disease Control, spoke on "VD—Today and Tomorrow;" with Mr. William R. Swecker, Family Planning Director, discussing "West Virginia's Family Planning Program."

Mrs. Jane D. Alderman, Health Planning Specialist in the State Office of Comprehensive Health Planning in Charleston, spoke on "Project Sound Off for Mental Health."

A presentation on "Hazards of Pesticides" was offered by Mr. David O. Quinn, Morgantown, State Extension Program Leader for the Safe Use of Pesticides and Chemicals.

Individuals who assisted Doctor Coyner on the Advisory Committee for this year's Conference were Miss Mildred E. Fizer, State Chairman, 4-H and Youth Development Programs and Women's Extension Education Program; Mrs. George D. Walker of Martinsburg, President of the West Virginia Home Demonstration Council; Miss Gertrude Humphreys of Morgantown, former State Extension Home Demonstration Leader; Dr. N. H. Dyer, West Virginia Director of Health, and Mr. Loutellus M. Stout, Executive Secretary of the West Virginia Farm Bureau.

State ACS Chapter To Hear Maryland, Loyola Speakers

The program for the fall meeting of the West Virginia Chapter, American College of Surgeons, will feature visiting as well as state speakers, Dr. Alvin L. Watne, Professor of Surgery at West Virginia University's School of Medicine and Vice President of the Chapter, has announced.

The sessions are scheduled for Friday and Saturday, November 12 and 13, at Mont Chateau, near Morgantown. The fall banquet will be held on the evening of November 12, and those registered for the meeting will attend the West Virginia University-Virginia Military Institute football game in Morgantown on Saturday afternoon, November 13.

Dr. Frank J. Freeark, Chairman of the Department of Surgery at Loyola University's Medical Center in Chicago, will present two lectures entitled "Angiography in the Care of Accident Victims" and "Thromboembolism in Trauma Patients."

Dr. Arlie R. Mansberger, Jr., Acting Chairman of the Department of Surgery at the University of Maryland, also will speak twice on "The Physiologic Basis for the Therapy of Shock" and "Diagnosis and Treatment of Post Traumatic Clostridial Myositis."

Others participating in the program will include Dr. A. Thomas McCoy and Dr. J. D. Harrah, both of Charleston; Dr. Tong Chang of Myers Clinic in Philippi; and Drs. Frank W. McKee, Robert Clark, Frank Griswold, Herman Turndorf, Robert Nugent and D. Franklin Milam, all of Morgantown.

Speakers for Chest Conference Listed by Co-Chairmen

The program continues to take shape for the Fifth Mid-Winter Conference on Chest Diseases scheduled for Sunday, January 30, at Charleston's Daniel Boone Hotel, Drs. Ralph H. Nestmann and Joseph T. Skaggs, the Co-Chairmen, have announced.

The agenda will be built around "New Developments in Lung Diseases." Doctors Nestmann and Skaggs, both of Charleston, said the program again will run from 10 A. M. to 4 P. M., with a noon recess for a buffet luncheon.

Subjects to be covered will include care of the tuberculosis patient in a general hospital; drug management of tuberculosis; training programs in emergency treatment of acute respiratory diseases; the role of a respiratory intensive care unit, and the value of lung scans in clinical medicine.

Speakers who have accepted invitations to date to participate in the program include:

Dr. Joe Bates, Professor of Medicine at the University of Arkansas Medical Center in Little Rock, Arkansas; Dr. William K. C. Morgan, Professor of Medicine and Chief of the Appalachian Laboratory for Occupational Respiratory Diseases at West Virginia University's Medical Center in Morgantown.

Dr. L. W. Stringer, Assistant Professor of Anesthesia and Director of Respiratory Therapy, Bowman Gray School of Medicine of Wake Forest University, Winston-Salem, North Carolina; Dr. Steven A. Artz, of Charleston, and Drs. William B. Hunt, Jr., and Terring W. Heironimus II, both of the University of Virginia Medical School in Charlottesville.

A registration fee of $10 will be charged all registrants except nurses, medical students, interns and residents, with the fee including the group luncheon. Advance registration again is requested, with checks to be made payable to The West Virginia State Medical Association. A registration form is printed for the first time elsewhere in this issue of *The Journal.*

Doctors Nestmann and Skaggs said that attendance at the course will be acceptable for credit toward the Physician's Recognition Award of the American Medical Association; and application also is being made to the American Academy of Family Practice for accreditation.

Medical Center Receives Grant

West Virginia University's Medical Center has been awarded a $29,048 grant by the National Institute of Neurological Diseases and Stroke to continue research on the role of magnesium in delirium tremors. Dr. Edmund B. Flink, Chairman and Professor of Medicine at WVU, is in charge of the research program.

State Doctors Play Key Roles In Annual SMA Program

A number of West Virginia physicians prepared papers and assumed other program responsibilities for the Southern Medical Association's 65th Annual meeting in Miami Beach, Florida, November 1-4.

Dr. Albert C. Esposito of Huntington completed his one-year term as SMA President, and prepared his Presidential Address for delivery at the Wednesday, November 3, General Session.

Dr. C. A. (Carl) Hoffman, also of Huntington and the American Medical Association's President Elect, spoke on "National Health Care and Its Prospects" at the same session.

Doctor Esposito's other duties included the moderator's role for a "Symposium on Medicoeconomics; The Business Side of Medicine" on Thursday, November 4; and discussion leader after a paper on "Pterygium: Surgery and Strontium-90" by Dr. George M. Haik of New Orleans, Louisiana, before the Section on Ophthalmology on November 1.

Two other Huntington physicians—Dr. William L. Neal and Dr. M. Bruce Martin—had roles as Secretary Elect of the Section on General Practice and Chairman of the Section on Pediatrics, respectively.

Also on November 1, Drs. George Miyakawa, Harold B. Sunday and Jack Pushkin, all of Charleston, participated in a discussion of "Surgical Treatment of Lower Extremities in Cerebral Palsy" for the Section on Orthopedic and Traumatic Surgery.

Doctor Miyakawa was scheduled to make the formal presentation, covering the surgical treatment of flexion contractures of the hips, knees and Achilles tendons in patients with cerebral palsy. Special reference was planned to the value of selective neurectomies of sciatic and popliteal nerves.

The November 2 program for the Section on Urology included a paper on "Pulmonary Metastasis in Testicular Tumors" by Dr. S. Gopal Raju of Beckley; and another on "Solid State Electrosurgical Units" by Dr. D. F. Milam of Morgantown.

Doctor Raju was prepared to discuss characteristics and management of testicular tumors with pulmonary metastes, based on his experience in three cases. Doctor Milam planned to relate his experience with the Electromedical Systems and Liebel-Flarsheim solid state electrosurgical units.

Dr. Philip M. Sprinkle, Professor of Surgery and Chairman of Otolaryngology at West Virginia University's School of Medicine in Morgantown, prepared a scientific exhibit on "Congenital Dermoid Cysts of the Nose" for the SMA meeting.

Doctor Corbitt Heads Committee

Dr. Richard W. Corbitt of Parkersburg, a Past President of the West Virginia State Medical Association, has been named Chairman of the Parkersburg Chamber of Commerce's Education Committee. He also is a Past President of the Chamber.

25th AMA Clinical Convention To Offer Varied Program

The American Medical Association's 25th Clinical Convention in New Orleans November 28 to December 1 again has been designed to bring the latest in practical, clinical information to the physician in practice.

All general and other scientific meetings will be held in the new Rivergate Exhibition Center at the foot of New Orleans' Canal Street.

Frank J. Holroyd, M. D.

Richard E. Flood, M. D.

The AMA's House of Delegates will meet concurrently at the Roosevelt Hotel, with Drs. Frank J. Holroyd of Princeton and Richard E. Flood of Weirton as the West Virginia State Medical Association's Delegates. Alternate Delegates are Drs. Albert C. Esposito of Huntington and Thomas G. Reed of Charleston.

The Convention's scientific meetings will be divided into broad major areas, with three or four of these to be covered at each morning and afternoon session.

There also will be three postgraduate courses, six luncheon roundtables, general sessions on selected topics, medical films and the scientific exhibit which will open at noon on Sunday, November 28.

Some of the scientific session topics will include:

Medical management of arthritis and rheumatic diseases; successful family planning in action; pathogenesis and management of coronary artery disease; dermatological problems in everyday practice.

Sequellae of cerebrovascular disease; immediate care of the ill and injured; diverticular disease of colon: present concept; drugs, society and the physician; modern management of renal failure.

Current concepts in diagnosis and treatment of bacterial and viral infections; surgical treatment of diseases of the liver, pancreas and biliary tract; and office gynecology, the management of common problems.

Topics for postgraduate courses set for 7:30 to 8:50 A.M. on Monday through Wednesday, November 29-December 1, will be "Blood Gases, Fluid and Electrolyte Balance;" "Cardiovascular Disease," and "Behavioral Problems in Children and Adolescents."

The daily roundtable topics will include hypoglycemic agents in diabetic control and office diagnosis of common endocrine problems on Monday, November 29; recent advances in managing shock and soft tissue injuries of the neck on Tuesday; and accidental poisoning in children and complications of antimicrobial therapy, scheduled for Wednesday.

SMA Scholarships Awarded WVU Medical Students

John T. Slevin of Parkersburg and Bernard J. Imrich of Bobtown, Pennsylvania—both first-year students in West Virginia University's School of Medicine—have been awarded medical student scholarships by the Southern Medical Association.

They were among 26 scholarship recipients chosen in the 16 states and the District of Columbia embraced by SMA. The scholarships are awarded annually to first-year medical students of superior ability.

In keeping with its primary objective to develop and foster scientific medicine, SMA established its Medical Student Scholarship Fund in 1969.

Headquartered in Birmingham, Alabama, Southern Medical Association is comprised of more than 20,000 physicians. The group's 65th Annual Meeting, an expansive session of scientific exhibits and seminars, was held this year in Miami Beach, Florida, November 1-4.

Former WVU Dean President Of Texas Dental Group

Dr. Kenneth V. Randolph, Dean of the Baylor University College of Dentistry in Houston, Texas, has recently been elected President and Academic Dean of a new educational corporation organized to operate the College as a private institution.

Doctor Randolph became Dean of the Baylor institution in August, 1968, after serving as Dean of West Virginia University's College of Dentistry for the previous 10 years.

Cancer Committee Meeting At The Greenbrier

A meeting of the Cancer Committee of the West Virginia State Medical Association was held at The Greenbrier on August 20, during the Annual Meeting of the Association. Dr. Alvin L. Watne of Morgantown, the Chairman, presided at the meeting.

A guest at the meeting was Mr. Thoroid Funk, Director of the Division of Vocational Rehabilitation, State of West Virginia.

The discussion centered upon the role of the Division of Vocational Rehabilitation and the cancer patient. Mr. Funk outlined in detail the function, goals and resources of the Division. He pointed out that the cancer patient presents a special problem for the rehabilitation program, and it was suggested that the Cancer Committee of the State Medical Association might aid the Vocational Rehabilitation program by providing guidelines for selecting the patients to receive rehabilitation help.

It was pointed out that counseling and guidance could be readily obtained from the present division and staff.

It was suggested that Mr. Funk and members of his staff help the Committee explore this matter at the next meeting.

TB and RD Association Names New Officers

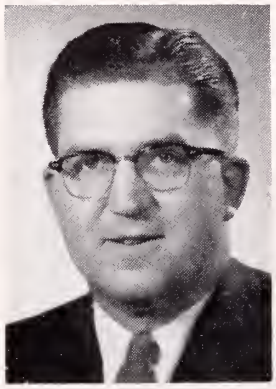
The West Virginia Tuberculosis and Respiratory Disease Association installed Dr. Joseph T. Skaggs of Charleston as its President at its annual meeting in Charleston on September 29, and also elected these other officers:

Mr. E. E. Barnett, Philippi, President Elect; Mr. Bernard Kelly, Weirton, Vice President; Miss Lela House, Williamstown, Secretary; Mr. James T. Miller, Charleston, Treasurer; Dr. Ralph H. Nestmann, Charleston, Assistant Treasurer; and Mr. John McCabe of Princeton, Dr. Richard V. Lynch, Jr., of Morgantown and Mr. E. Murray Taylor, Fairmont, Executive Committee members.

"It looks pretty good," Dr. Carl B. Hall (left) of Charleston tells Dr. Richard W. Corbitt of Parkersburg as the two discuss, in the left photo above, Doctor Hall's campaign for a seat on the American Academy of Family Physicians' National Board of Directors. Doctor Hall, pictured with Doctor Corbitt at the West Virginia State Medical Association's Annual Meeting in August at The Greenbrier, won election to the AAFP Board in Miami Beach, Florida, early in October. In the center photo, two Kenova physicians, Drs. H. S. Mullens (left) and Dr. W. W. Mills, relax during a break in an Annual Meeting General Session. At the right, Drs. A. Thomas McCoy of Charleston (left) and Thomas P. Long of Man await the opening of a session of the Medical Association's Council. Doctor McCoy later was elected as Vice President of the Medical Association.

Dr. Carl B. Hall Elected As AAFP Director

Dr. Carl B. Hall of Charleston won election to a three-year term on the Board of Directors of the American Academy of Family Physicians during that organization's Annual Meeting in Miami Beach, Florida, early in October.



Carl B. Hall, M. D.

The AAFP, formerly the American Academy of General Practice, is the national association of about 31,000 family doctors. Second largest of the nation's medical groups, it is the only such organization to require its members to take continuing education—150 credit hours every three years.

Doctor Hall was among new officers named by the AAFP's Congress of Delegates, who chose Dr. James L. Grobe of Phoenix, Arizona, as President-Elect. Dr. J. Jerome Wildgen of Kalispell, Montana, became President during the Miami Beach sessions.

Doctor Hall, a Williamson native, is a graduate of West Virginia University and the Medical College of Virginia. He interned at Charity Hospital of Louisiana in New Orleans in 1940-41.

A veteran of U. S. Army Medical Corps service during World War II, Doctor Hall has been active in numerous Kanawha Medical Society and West Virginia State Medical Association activities and programs.

He has served as both Chairman, and as a member in 1971, of the Program Committee for the Medical Association's Annual Meeting at The Greenbrier.

For the past year, Doctor Hall has been Chairman of the AAFP's Insurance Committee, and his AAFP participation included membership on that group prior to his appointment as Chairman.

Other officers elected by the AAFP's 1971 Congress included Dr. A. Alan Fischer, Indianapolis, Indiana, Vice President; and Drs. Jack G. Phipps, Wichita, Kansas, and George A. Rowland, Millville, Pennsylvania, to the Board for three-year terms.

Drs. James G. Price, Brush, Colorado, and Stanley A. Boyd, Eugene, Oregon, were re-elected as Speaker and Vice Speaker, respectively, of hte Congress of Delegates.

Doctor Wildgen, the 47-year-old new President of the AAFP, is a graduate of the University of Kansas School of Medicine, and has served as President Elect for the past year. He also has been a member of the Board of Directors for three years.

He is a clinical instructor and preceptor in family medicine at the University of Washington School of Medicine; and serves as a consultant in family practice to the U. S. Air Force. He is a charter Diplomate of the American Board of Family Practice.

AMA Convention Courses To Carry PRA Credit

Physicians participating in postgraduate courses and other "in depth" scientific programming at the American Medical Association's Annual and Clinical Conventions will receive formal continuing education course credit toward the AMA's Physician's Recognition Award.

At the AMA's 1971 Clinical Convention November 28 to December 1 in New Orleans, hour-for-hour credit will be limited to the three postgraduate courses being offered. These courses are listed in another story elsewhere in this issue of *The Journal.*

A principal PRA requirement is completion of 60 credit hours of required education activities. Previously, those who attended postgraduate courses and other Council on Scientific Assembly-sponsored programming at AMA conventions received only elective credits for participation in non-local scientific medical meetings unless the programming they attended was accredited by their medical specialty organization.

New AAFP President Elect Native of Huntington

Dr. James L. Grobe of Phoenix, Arizona, President Elect of the American Academy of Family Physicians, is a native of Huntington who has a bachelor of science degree from West Virginia University.

Doctor Grobe, 50, did pre-med work at Marshall University as well as at WVU prior to his graduation from the Medical College of Virginia in Richmond. He interned at Good Samaritan Hospital in Phoenix.

Doctor Grobe is the son of James W. and Emma J. Grobe. He and Mrs. Grobe—the former Rosalind June Evans of Huntington—are the parents of two sons and two daughters.

Looking Back 10 Years . . .

Dr. D. E. Greenelich of Wheeling (second from right), then President of the West Virginia State Medical Association, made his official visit to the Logan County Medical Society on November 8, 1961. Logan County physicians in the picture (left to right) are Dr. Harold Van Hoose, Dr. John R. Wilkinson, Jr., and Dr. Thomas P. Long, all of Man.

WVU Hospital Accredited Under New Standards

Less than two months after an inspection visit by representatives of the Joint Commission on Accreditation of Hospitals, West Virginia University Hospital has received notice of its full, two-year accreditation.

"We were the first university hospital in the country to be rated under the Commission's new standards which became effective July 1," said Eugene L. Staples, University Hospital Director.

Reflecting the new and more complete inspection plan, two-day visits by two-man teams every two years have replaced the one-day visits by one representative every three years. The hospital will do a self-survey in the intervening year.

Accreditation is a mark of aproval from four national groups: the American College of Physicians, the American College of Surgeons, the American Hospital Association and the American Medical Association.

Set to open early next year to help meet increasing patient care needs, a four-story addition under construction at University Hospital will house a specially designed 16-bed intensive care unit, and expanded emergency room and radiology facilities.

Admissions to University Hospital for the year which ended June 30, 1971, numbered 12,253, an increase of 217 over the previous year. Among other figures listed in the hospital's latest annual report are: outpatient visits, 84,828 (1970-71) and 80,831 (1969-70); emergency room visits, 26,307 (1970-71) and 25,611 (1969-70); x-ray-diagnostic, 60,140 (1970-71) and 59,065 (1969-70); and laboratory procedures, 718,322 (1970-71) and 633,860 (1969-70).

New State Medical Network Available to Physicians

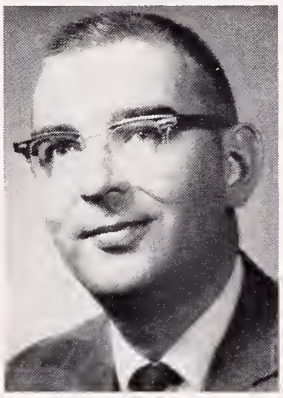
A multi-unit communication facility has gone into operation at West Virginia University's Medical Center to further continuing education of medical personnel in the state, Charles D. Holland, Director of the West Virginia Regional Medical Program, has announced.

For the first time in West Virginia, nurses, pharmacists, physicians and other allied health personnel have free access to three units of information via the network. These three units of information are: (a) a drug information service, (b) a toxicology information service, and (c) a dial access service with two medical tape libraries for physicians and nurses.

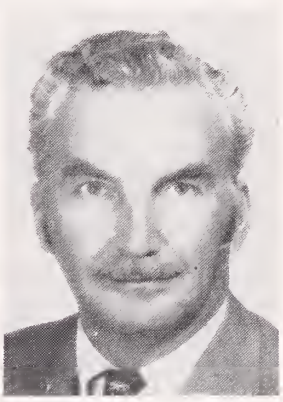
Director Holland said the project has been designed to support improved care of the patient in his own community by making available information not readily found at the local level; and to establish and maintain improved communication with medical and allied health personnel throughout the state by providing services not previously available.

Doctor Tarnay New President Of W. Va. Heart Assn.

Thomas J. Tarnay, M.D., Associate Professor of Surgery at the West Virginia University School of Medicine in Morgantown, is the new President of the West Virginia Heart Association. He was elected at the Association's Annual Meeting September 17-18 in Clarksburg, Mrs. Seth Savage of Vienna, Chairman of the Board, announced. Doctor Tarnay succeeded Forest A. Cornwell, M.D., of Beckley.



Thomas J. Tarnay, M. D.



Harold Selinger, M. D.

Also elected as officers for 1971-72 were: Harold Selinger, M.D., Charleston cardiologist, President Elect; Michael Wilson, M.D., WVU Medical Center, Vice President; Mrs. Caroline Rainbolt, Charleston, Secretary; Peter S. White, Charleston, Treasurer; and Mrs. Walter Mather, Parkersburg, Vice Chairman of the board.

A native of New York, Doctor Tarnay attended public school there, received his A.B. degree from Cornell University, and his Medical degree from Columbia University College of Physicians and Surgeons. He served his internship at Bellevue Hospital in New York, where he was assistant resident.

Doctor Tarnay also was a Surgical Fellow at the University of Minnesota and West Virginia University, and has received a Postdoctoral Fellowship from the National Institute of Health.

He has been certified by the American Board of Surgery and the Board of Thoracic Surgery, and is a member of the National Association for the Advancement of Science and the American College of Surgeons, in addition to the American Heart Association and its West Virginia affiliate.

Doctor Tarnay has received research grants in the heart field from several organizations over the past few years, and is the author of nine publications. He and his wife, Marie, are parents of two children.

Inhaling Sprays Dangerous

A new warning that inhaling aerosol sprays might affect the heart and lead to death under certain circumstances has been issued by the National Society for Medical Research in Washington, D. C.

Four WVU Medical Seniors In Overseas Programs

Belgium, Turkey, The Congo and Costa Rica shared at least one activity this past summer. Each country provided interesting, if brief, experiences for a senior from West Virginia University School of Medicine.

Using the wider freedoms of choice the school's still new fourth-year selective program offers were Judith Buff, who spent the month of August studying neurology at Belgium's University of Ghent; William Knaus, who traveled to Turkey for pediatric surgery experiences in Ankara; Dean Patton, who participated in missionary medicine for ten weeks at villages in the northeastern part of Democratic Republic of Congo; and Ronald M. Cyphers, who joined several graduates and six other U. S. medical students at Louisiana State University's International Center for Medical Training and Research in San Jose, Costa Rica.

Judy Buff chose her elective via a Student American Medical Association foreign exchange division booklet. At Ghent, she met students from Greece, Malta, Finland, Yugoslavia, Czechoslovakia and many other countries as well as Belgium, although she was the only American in the program. Like medical students anywhere, she says, it wasn't long before all of them were "talking shop."

During her stay she noted: no wards in the hospital's neurology division—only private rooms; no night or weekend calls for students; a different approach used in many clinical procedures; and a heavy emphasis on the basic courses for medical students but less actual experience in the clinical years.

Hydatid cysts of the liver, neuroblastomas, Wilms' tumor, schistosomiasis, and Hirschsprung's disease —common in Turkey; observance of all these was part of the valuable experience Bill Knaus gained during his eight weeks at Ankara's Hacettepe University Medical Center. There his time was spent mostly on the 35-bed pediatric surgery service and in the 500-bed pediatric hospital.

After flying in June to Kinshasa, the capital of Congo, Dean Patton and his wife, Deanna, continued by air to Bunia, from which a 90-minute car trip over dusty dirt roads brought them to Centre Medical Evangelique, a 220-bed hospital located in the village of Nyankundi and operated by five evangelical mission societies.

The medical staff at CME is responsible also for five small hospitals and 35 dispensaries within a 300-mile radius. The doctors make one week visits to each hospital every fifth week, and a short wave radio network operates during daylight hours and connects all the facilities. Efficiency is further enhanced by a Missionary Aviation Fellowship airplane which can bring a patient to CME or fly a doctor to the scene of an emergency. Outpatients seen and treated at CME average 800 a day.

Congolese male nurses are trained in a three-year school at CME, and after a year of internship there each is qualified to oversee the work of a dispensary. Recognition of their diplomas by the government, however, means that their employment need not be restricted to mission hospitals.

The top leadership for the next two years in the Woman's Auxiliary to the West Virginia State Medical Association is represented by those shown here. At left is Mrs. M. Bruce Martin of Huntington, the current Auxiliary President, as she talked with Mrs. Robert G. Janes of Fairmont, the President Elect, during the 24th Annual Rural Health Conference at Jackson's Mill.

Because he is interested in surgery, Patton spent most of his time helping the CME board-certified surgeon, but for five weeks he did accompany other staff doctors on medical safaris to outlying stations.

The Pattons had personal experiences with malaria, the most prevalent disease of the area. Also widespread there are tuberculosis and intestinal parasites. Tumors, many of them malignant, are treated with surgery when possible. Some chemotherapy is used, but radiotherapy facilities do not exist.

And the Pygmy population, under recent government order to move out to the roads from the forests near Nyankundi, is showing a distressing incidence of pneumonia—rarely seen before in their sheltered subculture.

Ron Cyphers' assignment to San Jose was under the preceptorship of Dr. Antonio P. Chavarria who is known as the father of Costa Rican medicine.

His study was oriented to infectious diseases of the tropics, with the disciplines of internal medicine, pediatrics, preventive medicine and pathology playing the major roles.

Examples of the different spectrum of diseases he was able to see include tetanus, diphtheria, sporotrichosis, leishmaniasis, typhoid fever, South American blastomycosis, malaria, chromomycosis, scrofula and leprosy.

PG Course in Internal Medicine In Cleveland Nov. 10-11

Staff members of the Cleveland Clinic Educational Foundation will present a postgraduate course entitled "Problems in Internal Medicine" November 10 and 11 in the Bunts Auditorium of the Education Building in Cleveland.

The course registration fee will be $60, with acceptances in the order of applications. Additional information may be obtained from Education Secretary, Cleveland Clinic Educational Foundation, 2020 East 93rd Street, Cleveland, Ohio 44106.

Medical Record Association Chooses New Officers

Miss Marie Meadows, Director of Medical Records at the Beckley Appalachian Regional Hospital, was installed as President of the West Virginia Medical Records Association at that group's 23rd Annual Meeting in Parkersburg late in September.

Other officers chosen by the Association include Miss Sophia Griffith of Charleston, President-Elect; Virginia M. Hudson of Logan, Secretary; Justine Danser of Weston, Treasurer, and Catherine Bowling, White Sulphur Springs, as a Director.

Dr. Harry S. Weeks, Jr. (seated at right), President of the West Virginia State Medical Association, addressed members of the Central West Virginia Medical Society and their wives at a meeting in late September at the Buckhannon Country Club. Others seated, left to right, are Dr. Robert R. Weiler of Wheeling; Dr. M. Bruce Martin of Huntington, and Dr. C. R. Davisson of Weston, President during the past year of the Central West Virginia Society. Standing, left to right, are Mrs. Weiler, Northern Regional Director of the Woman's Auxiliary to the State Medical Association; Mrs. Martin, the State Auxiliary President; Mrs. Davisson, President of the Auxiliary to the Central West Virginia Society; and Mrs. Weeks.

Medical Group Plans Grow

The first major medical group plan in the United States was issued in 1949, and about 108,000 persons had such coverage by the end of 1951. The Health Insurance Institute said that 72 million individuals had such insurance at the beginning of 1970, and that benefit payments ran almost $2 billion in 1969.

Medical Aspects of Sports Program In New Orleans, Nov. 28

The American Medical Association's Committee on the Medical Aspects of Sports will hold its 13th National Conference on Sunday, November 28, at the Jung Hotel in New Orleans.

The program arranged by the Committee, of which Dr. Richard W. Corbitt of Parkersburg is a member, will be held in conjunction with the first day of the AMA's Clinical Convention.

Richard W. Corbitt, M. D.

The Conference will offer forums and discussion sections related to drugs in sports; protection of the lower extremities; electrolyte and thermal balance; innovations in sports medicine through state medical societies; team physician relationships, crucial health perspectives, and a medical focus on athletics.

W. Delano Meriwether, M.D., winner of the J. D. Lane Annual Research award for his work at the National Cancer Institute in Baltimore, Maryland, and a sprint standout, will discuss "My Experiences as a Neophyte Track Athlete" at the November 28 luncheon. Doctor Meriwether now is a researcher at the Harvard Medical Unit in Boston, Massachusetts.

The evening session will feature demonstrations on taping, equipment fitting, vision, emergency resuscitation and pre-participation examinations.

The Conference will be open to key non-medical athletic personnel as well as interested physicians. Further information may be obtained from the Committee on the Medical Aspects of Sports, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

Family Practice Board Schedules Exam for Next April

The American Board of Family Practice has announced that it will give its next examination for certification on April 29 and 30, 1972, in various centers throughout the United States.

Information regarding the examination may be obtained from Nicholas J. Pisacano, M.D., Secretary, American Board of Family Practice, Inc., University of Kentucky Medical Center, Annex No. 2, Room 229, Lexington, Kentucky 40506.

The deadline for receiving completed applications in the Board's offices will be February 1, 1972.

First Family Practice Diplomates Include 29 State Doctors

Twenty-nine West Virginia physicians are in the charter membership group of Diplomates of the American Board of Family Practice, headquarters of the American Academy of Family Physicians in Kansas City, Missouri, has announced.

The family physicians successfully completed, in February, 1970, or February, 1971, the initial two-day certifying examinations given in the new medical specialty of family practice.

The AAFP, national association of family doctors, was one of two sponsoring organizations for the new American Board of Family Practice, the certifying agency that was approved by the American Medical Association and the Advisory Board for Medical Specialties in February, 1969.

The other sponsoring group was the Section on Family and General Practice of the AMA.

The Board of Family Practice has been considered unique among specialty boards because it has no "grandfather clause" permitting doctors practicing in the specialty when a board is created to become Diplomates without taking an examination.

The Board also took on an unusual characteristic with a requirement for recertification by examination at six-year intervals to maintain membership status.

Here are the Diplomates practicing in West Virginia:

Drs. Kenneth J. Allen, Glen Dale; John S. Blagg, South Charleston; Marshall J. Carper, Charleston; John S. Cook, Jr., Welch; William D. Crigger, South Charleston; Donald E. Cunningham, St. Albans; Del Roy R. Davis, Kingwood; Thomas O. Dickey, McMechen; Walter E. Duling, Charleston; James V. Gainer, Jr., Kingwood.

Ray S. Greco, Weirton; Louis W. Groves, Jr., Richwood; Thomas G. Harper, Burgettstown, Pa.; Andrew H. Henderson, Williamson; Robert D. Hess, Bridgeport; Donald H. Hofreuter, Wheeling; Robert G. Janes, Fairmont; Joe N. Jarrett, Oak Hill; George M. Kellas, Wheeling; Ray M. Kessel, Logan.

Buford W. McNeer, Hinton; Harvey D. Reisenweber, Martinsburg; William S. Sadler, Barboursville; L. Dale Simmons, Clarksburg; Jack J. Stark, Belpre, Ohio; John William Traubert, Wellsburg; C. Carl Tully, South Charleston; James E. Wise, Follansbee, and James H. Wolverton, Keyser.

Change of Address

Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. Notices should be mailed to Box 1031, Charleston, West Virginia 25324.

Medical Meetings

The following is a partial list of national, state and district medical meetings scheduled in the coming months.

1971

Nov. 8-11—Pa. Medical, Lancaster.
Nov. 9-16—Am. Heart Assn., Anaheim, Calif.
Nov. 28-Dec. 1—AMA Clinical, New Orleans.
Dec. 4-9—Am. Acad. of Derm., Chicago.
Dec. 5-7—Am. Society of Hema., San Francisco.
Dec. 6-8—Sou. Surg. Assn., Hot Springs, Va.

1972

Jan. 24-26—Soc. of Thoracic Surg., San Francisco.
Jan. 30—5th Mid-Winter Conf. on Chest Diseases, Charleston.
Feb. 4-12—Am. Soc. of Clin. Path. & Col. of Am. Path., Atlanta.
Feb. 5-6—AMA Cong. on Med. Educ., Chicago.
March 1-5—Am. Col. of Cardiology, Chicago.
March 2-4—Central Surg. Assn., Chicago.
March 6-7—Int. Acad. of Path., Chicago.
March 27-30—Southeastern Surg. Cong., Washington.
April 3-8—Am. Col. of Rad., Bal Harbour, Fla.
April 13-18—Am. Derm. Assn., Dorado Beach, P. R.
April 16-20—Am. Assn. of Neu. Surg., Boston.
April 16-21—ACP, Atlantic City.
April 17-20—Am. Col. of Ob. & Gyn., Chicago.
April 21-23—W. Va. Chapter, AAFP, Charleston.
April 24-29—Am. Acad. of Neurology, St. Louis.
April 26-29—Am. Ped. Soc., Atlantic City.
April 26-29—W. Va. Acad. of Oph. and Otol., White Sulphur Springs.
May 1-3—Am. Assn. for Thoracic Surgery, Los Angeles.
May 1-5—Am. Psy. Assn., Washington.
May 3-5—Maryland Medical, Baltimore.
May 3-6—W. Va. Chap., ACS, White Sulphur Springs.
May 6—Am. Col. of Psy., Dallas.
May 8-12—Ohio Medical, Cincinnati.
May 18-20—Am. Gyn. Soc., Hot Springs, Va.
May 21-24—Am. Thoracic Soc., Kansas City.
May 22-25—Am. Urol. Assn., Washington.
June 8-14—Am. Rheumatism Assn., Dallas.
June 18-22—AMA, San Francisco.
June 24-25—Am. Diabetes Assn., San Francisco.
July 5-10—Int. Col. of Surg., Lake George, N. Y.
Aug. 7-10—Am. Hosp. Assn., Chicago.
Aug. 24-26—105th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.
Sept. 7-9—Am. Assn. of Ob.-Gyn., Hot Springs, Va.
Sept. 9—Ky. Medical, Louisville.
Sept. 11-12—AMA Cong. on Occupational Health, Chicago.
Sept. 22-28—AAFP, New York.
Sept. 25-29—Am. Acad. of Oph. and Otol., Dallas.
Sept. 30-Oct. 4—Am. Soc. of Anes., Boston.
Oct. 2-6—ACS, San Francisco.
Oct. 8-12—Pa. Medical, Lancaster.
Oct. 10-12—Ind. Medical, Indianapolis.
Oct. 14-19—Am. Acad of Ped., New York.
Oct. 15-18—Am. Urol. Assn., Mid-Atlantic Sec., White Sulphur Springs.
Oct. 25-29—Am. Col. of Chest Phys., Atlanta.
Nov. 2-4—Am. Soc. of Cyt., New Orleans.
Nov. 5-8—Va. Medical, Williamsburg.
Nov. 13-16—Sou. Med. Assn., New Orleans.
Nov. 14-21—Am. Heart Assn., Dallas.
Nov. 26-29—AMA Clinical, Cincinnati.

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Rheumatic Fever: A Diagnostic Review*

Roland Schmidt, M. D.

We hear a lot about problem solving nowadays, particularly from people who write and talk about medical education. It's well to remember that in order to solve problems we have to keep our basic information in good order. In this regard I thought a review of rheumatic fever might be useful. I'd like to do this through a series of questions and answers.

Q: What is rheumatic fever?

A: Rheumatic fever is a poorly understood, acute, inflammatory condition which follows infection with group A beta-hemolytic Streptococcus.

Q: How about other groups of beta-hemolytic Streptococci? Do they cause rheumatic fever?

A: No.

Q: How about alpha-hemolytic Streptococci (Strep. viridans)? Do they cause respiratory infection and lead to rheumatic fever?

A: No. They do *not* cause respiratory infection. They do *not* lead to rheumatic fever. They are normal inhabitants of the oropharynx (they are important in that they may cause endocarditis if they get into the blood stream of a patient whose valves have been damaged by rheumatic fever).

Q: There are over 50 types of group A beta-hemolytic Streptococci. Infection with a minority of these may lead to acute glomerulonephritis. Which types are precursors of acute rheumatic fever?

A: All 50-plus.

Q: What per cent of patients who have group A beta-hemolytic infection develop acute rheumatic fever?

A: This has to be answered in two ways. Under epidemic conditions three per cent appear to develop acute rheumatic fever. Under non-epidemic conditions the likelihood is only 1/10 as great, or three-tenths per cent.

The Author

- **Roland Schmidt, M. D., Acting Assistant Dean for Curriculum, West Virginia University School of Medicine, Morgantown.**

Jones Criteria (Revised) for Guidance in the Diagnosis of Rheumatic Fever

MAJOR MANIFESTATIONS	MINOR MANIFESTATIONS
Carditis Polyarthritis Chorea Erythema marginatum Subcutaneous nodules	*Clinical* Fever Arthralgia Previous rheumatic fever or rheumatic heart disease *Laboratory* Acute phase reaction Erythrocyte sedimentation rate, C-reactive protein, leukocytosis Prolonged PR interval

PLUS

Supporting evidence of preceding streptococcal infection (increased ASO or other streptococcal antibodies; positive throat culture for Group A streptococcus; recent scarlet fever).

Q: What is the interval between development of the streptococcal infection and onset of acute rheumatic fever?

A: This interval is called the latent period. Its duration usually is one to six weeks. Rheumatic chorea is an exception. In chorea the latent period is one to six months.

Q: Can acute rheumatic fever be prevented?

A: Yes. It's been shown that adequate Penicillin therapy, initiated within the first nine days of the streptococcal infection, will prevent acute rheumatic fever.

Q: Then it is possible to wipe out acute rheumatic fever?

A: No. Only one-half of the patients with streptococcal infection are sick enough to go to

*Presented at a scientific session on April 30, 1971, during the Annual Meeting of the West Virginia Chapter, American Academy of Family Physicians, at Oglebay Park in Wheeling.

the doctor. The other half remain untreated and are susceptible to acute rheumatic fever.

Q: What segment of the population shows the highest attack rate?

A: Children in the primary school grades.

Q: Is there an exception to the preceding statement?

A: Yes. When Sydenham's chorea is the initial manifestation, pre-adolescent and adolescent girls, a somewhat older group, prove the most susceptible. It's interesting, too, that girls are more likely to develop chorea, whereas for the other manifestations of rheumatic fever there is no sex difference.

Q: Are there age limits?

A: Acute rheumatic fever is very rare in older people and in children under the age of five. But a first attack has been reported in a one-year-old and in patients in their sixties (the youngest I've seen was three).

Q: Does rheumatic fever run in families?

A: Certain families do seem particularly susceptible. The trait is considered a Mendelian recessive.

Q: How about social factors?

A: Crowding and lack of medical attention create a higher incidence in the poor.

Q: The overall incidence is decreasing, right? And severity of initial attacks is decreasing?

A: Right, I guess. We don't seem to see as many of the terribly sick children with devastating pancarditis, or rheumatic pneumonia, to comment on severity. But there's still plenty of acute rheumatic fever occurring. It is still a major health problem. Dr. Floyd Denny, Chairman of the Section on Rheumatic Fever of the American Heart Association, says there are one and a half million cases of rheumatic heart disease in the country.

Q: We can't eradicate rheumatic fever because physicians get to see only half of the patients with the predisposing streptococcal infection. What about the programs to prevent recurrences—the Penicillin prophylaxis programs—how successful are they?

A: The programs are very successful, but the country is not fully covered. I'll quote Doctor Denny again. He says adequate rheumatic fever programs could save 40 million dollars a year in the area of hospital expenditure, and "indirect savings would amount to at least 250 million dollars a year."

Q: How do you know when a child has acute rheumatic fever?

A: It's not always easy, or clear-cut. The Jones criteria, as modified by the American Heart Association, are a useful guide.

Q: What are the Jones Criteria?

A: They are divided into major and minor criteria. The majors, in order of frequency, are:

Arthritis (75 per cent)
Carditis (50 per cent)
Chorea
Subcutaneous nodules
Erythema marginatum

Q: How likely are you to see subcutaneous nodules or erythema marginatum?

A: You have to get up early in the morning. The British apparently get up earlier than we, as they report a higher incidence of subcutaneous nodules and erythema marginatum in their series.

Q: So the major criteria we are likely to encounter are arthritis, carditis and chorea?

A: Yes.

Q: What are the characteristics of the arthritis?

A: It is a migratory arthritis, affecting *more than one joint*. It affects the larger joints of the extremities. It is a *true arthritis,* as distinguished from arthralgia.

Q: A "true" arthritis?

A: Yes. A true arthritis is associated with objective findings. The joint is *red, hot, swollen* and *tender*. With arthralgia the joint is painful, but it is *not* red, *not* hot, *not* swollen, *not* tender. Arthralgia is not a major criterion of acute rheumatic fever. It's unfortunate, in a way, that arthralgia is even a minor criterion, as this creates an area of confusion.

Q: How long does the arthritis last?

A: Untreated it may last two to four weeks. Usually there is dramatic relief of pain and tenderness within 24 hours of institution of aspirin therapy.

Q: Does the arthritis cause permanent damage?

A: Never.

Q: How about carditis? How often does this occur?

A: The answer was provided very neatly by Dr. Benedict Massell, of the House of the Good Samaritan in Boston. Of 206 patients he followed through an initial attack of rheumatic fever, 103, exactly 50 per cent, showed evidence of carditis. In the great majority of those who developed carditis this declared itself within the first week of the rheumatic attack.

Q: How is the carditis identified?

A: By recognizing that a pathological murmur has developed. This is how the carditis usually is identified. I will mention other ways.

Q: A pathological murmur?

A: That would usually be the murmur of mitral insufficiency. Sometimes it's a murmur of aortic insufficiency.

Q: What are the characteristics of these murmurs?

A: These are very specific murmurs, with specific criteria for their recognition. The murmur of mitral insufficiency is heard best at the apex. It is transmitted to the left axilla and often to the left side of the back. It's a systolic murmur, called holosystolic or pansystolic because it goes all the way through systole. The murmur of aortic insufficiency is a blowing, high-pitched, early diastolic murmur heard best along the left sternal border. It can be hard to hear. You're most likely to pick it up if you listen with the diaphragm. Have the patient sit up, blow his breath out and hold it out. Then listen carefully to the time interval directly following the second heart sound. This murmur may be loud or it may be merely a high-pitched whisper.

Q: Are the murmurs and the cardiac damage permanent?

A: The aortic insufficiency, when it develops, usually is permanent. The murmur of mitral insufficiency may go away. We learned that 50 per cent of patients show evidence of carditis in their initial attack of rheumatic fever. In about 33 per cent there is permanent cardiac damage.

Q: Is there other evidence of carditis?

A: Patients who have sufficient myocardial inflammation may go into congestive failure. An occasional patient will develop pericarditis, as evidenced by a friction rub, characteristic electrocardiographic findings, or characteristic appearance of the heart on x-ray.

Q: Cardiac damage is the only permanent damage the rheumatic fever patient can sustain?

A: That is correct.

Q: Don't children have mitral stenosis?

A: I've seen a case. We've had one 14-year-old at WVU who received valvotomy for relief of a tight mitral stenosis. So the answer is: No, children hardly ever have mitral stenosis.

Q: How about aortic stenosis?

A: That again is an adult lesion insofar as rheumatic fever is concerned. Congenital aortic stenosis of course occurs, and may cause problems in earliest infancy.

Q: Is there anything unusual about Sydenham's chorea?

A: Yes. The latent period is much longer than for the other manifestations of acute rheumatic fever. In chorea the latent period is one to six months instead of one to six weeks.

Q: What relation does this have to diagnosis?

A: Because of the prolonged latent period, Sydenham's chorea tends to be an isolated finding, unaccompanied by any other evidence of rheumatic activity. For example: The patient is not likely to have fever, the sedimentation rate usually is normal, and there usually is no active joint or cardiac involvement at the time of the chorea. Even the ASO titer usually is normal by the time the chorea manifests itself.

Q: What are subcutaneous nodules like and where are they found?

A: They are firm, pea-sized nodules, freely movable, nontender, and are most likely to be found on the extensor surfaces of the knees or elbows, at wrists or ankles, or on the dorsum of hands or feet. They may be found at the temples, in the occipital region, or over the upper spine.

Q: What are the characteristics of erythema marginatum?

A: The lesions are flat and confluent, with a red serpiginous border and a pale center. They are likely to be found on the lower trunk and upper thighs, but may be found on the extremities as well.

Q: What are the minor Jones criteria?

A: Perhaps it's time to look at the illustration showing the Jones criteria, as modified by the American Heart Association. The minor manifestations of acute rheumatic fever are: *clinical,* fever, arthralgia, and previous rheumatic fever or rheumatic heart disease; *laboratory,* an elevated sedimentation rate, elevated CRP, leukocytosis, or a prolonged P-R interval. All are much less specific for rheumatic fever than the major manifestations.

Q: How are the Jones criteria to be used?

A: For a diagnosis of acute rheumatic fever, one should have documented at least two major manifestations or one major and two minors.

Q: But these guidelines don't apply in the case of chorea?

A: That's true. A clear case of Sydenham's chorea makes the diagnosis of acute rheumatic fever all by itself, without any of the other manifestations.

Q: What's the significance of the *PLUS* which is circled at the bottom of the illustration.

A: This is the major feature of the revision of the Jones criteria. For a secure diagnosis, it is important to have supporting evidence of preceding streptococcal infection. The evidence can be an elevated ASO titer, a positive throat culture, or a history of recent scarlet fever.

Q: What is a normal ASO titer?

A: This varies with age and exposure. In infancy a titer of 250 would be high. In the 6 to 14-year age group, the group that develops acute rheumatic fever, a titer of 333 is not unusual.

Q: What is an elevated titer?

A: In a control group, as mentioned, a titer of 333 is not unusual. With uncomplicated streptococcal infection, titers run from 125 to 833. With acute rheumatic fever, titers range from 166 to 1250. Some place top normal at 250. I class 333 as suspicious, and 500 as abnormal.

Q: When does the ASO reach its peak?

A: At about four weeks after the onset of infection.

Q: How long does it remain high?

A: It has dropped by eight weeks and usually is back within normal range by 12 weeks.

Q: The ASO is affected by therapy?

A: Yes, when the streptococcal infection has been treated with Penicillin the titers don't go as high.

Q: What about the throat culture?

A: We always get one. It's good evidence if positive. But it's usually negative by the time rheumatic fever has appeared or been recognized.

Q: What about preceding scarlet fever?

A: Again, good evidence if present, but only a few patients with group A beta-hemolytic infection have scarlet fever. Most have a tonsillitis without the rash.

Q: So we find ourselves relying most strongly on the ASO elevation?

A: That's correct.

Q: Can one be pretty sure of scarlet fever by history?

A: Yes, if the child had scarlet fever the mother will probably say so if you ask her. If she doesn't the evidence would be a history of tonsillitis, usually severe, accompanied by a confluent rough red rash, sparing the face, which desquamated during convalescence. A story of desquamation of the palms of the hands and soles of the feet is particularly significant.

So you look for two majors and something in the *PLUS* box, or one major, two minors and something in the *PLUS* box, always excepting Sydenham's chorea, which can stand by itself.

Q: Are the Jones criteria important? If so, why?

A: Yes, I think they are. They have done good service, especially as a safeguard against overdiagnosis.

Q: Are there pitfalls and problems?

A: I'll mention two pitfalls and one problem.

Pitfall No. 1: To label what is only an arthralgia as arthritis, and make a diagnosis of acute rheumatic fever on the basis of arthralgia, fever and an elevated sed. rate. The diagnosis has then been made in the absence of any major criterion. This does happen.

Pitfall No. 2 is harder to avoid. A child who has fever will often have some amplification of an innocent murmur. The murmur may be labelled as pathological and accepted as evidence of rheumatic carditis. In this type of case, I would say when in doubt refer the child for an opinion to a capable pediatric cardiologist. It's important to steer clear of an inadequately supported diagnosis of rheumatic fever. These are probably the main pitfalls, both of them leading to overdiagnosis.

A big problem that often occurs is the difficulty of digging up strong evidence of preceding streptococcal infection. Often we're stuck with a negative throat culture, no story of scarlet fever, and a wishy-washy ASO of 333 Todd units. So we're often unable to nail down the preceding streptococcal infection.

So much for this diagnostic roundup. For a complete review, equal time should be spent on rheumatic carditis, the only life-and-death aspect of rheumatic fever, and on the therapy of acute rheumatic fever and rheumatic heart disease.

My mother loved children—she would of given anything if I had been one.

Groucho Marx

1971 Student Research Convocation West Virginia University School of Medicine

The Seventh Annual Student Research Convocation took place on April 2, 1971. The first prize, an engraved medallion and a $300 cash award, was established in 1965 to honor Dr. Edward J. Van Liere, Dean Emeritus, for his leadership in bringing the School of Medicine to full stature, his devoted interest to undergraduate students and his many scientific achievements. The second and third prizes were $200 and $100, respectively. Publication of the abstracts in *The West Virginia Medical Journal* constitutes important and much appreciated recognition of the students' efforts.

Charles R. Craig, Ph. D., *Chairman*
Student Research Convocation Committee

DNA Replication-Repair

Stephen Kirby Milroy, Medicine II

In the past it has been shown that x-irradiation produces chromosome breaks. Ultraviolet irradiation has been shown to produce bonding changes in DNA which are repaired by enzymatic excision of the damaged segments of DNA and replaced with undamaged nucleotides. Studies to date have been conflicting as to whether or not repair of these two types of radiation damage to DNA is under control of the same enzymes. This study shows that the repair of x-irradiation and UV irradiation to human white blood cells involves two separate and distinct enzymatic systems.

Cell suspensions of human white blood cells were cultured in appropriate media and slides of the cells were prepared to establish chromosomal breakage and to study DNA replication-repair. Multiple cultures were prepared for various doses of x-irradiation. One set of cultures was irradiated before incubation and another irradiated following 70 hours of incubation. A third set of cultures was irradiated and prepared for autoradiography.

Alterations in the chromosomes were scored as chromatid gaps, chomatid breaks, and chromosome breaks. The total number of chromosome aberrations increased linearly with the dose of radiation used. The total number of chromosomal aberrations observed was significantly lower in those cells irradiated prior to culture relative to those irradiated after 70 hours incubation. At the doses of x-irradiation used there was no indication of replication repair of DNA.

These studies clearly show repair of x-ray induced chromosome breaks in human white blood cells. From other studies repair of chromosome breaks following x-irradiation is presumed to be enzymatic, and replication-repair of DNA following UV irradiation is known to be enzymatic. The lack of replication-repair following x-irradiation shown by this study, together with lack of chromosome breakage after UV irradiation clearly demonstrates the presence of independent enzyme systems operating to repair the two types of DNA damage.

The Effect of Postganglionic Denervation on the Sensitivity of the Smooth Muscle of the Guinea Pig Vas Deferens to Electrical Stimulation

David C. McClure, Medicine II

Postsynaptic supersensitivity, which occurs in a variety of autonomically innervated tissues, is defined as an increased response of the tissue to drug stimulation. The phenomenon follows any procedure which results in chronic inactivity of the tissue (denervation; neurotransmitter depletion). The sensitivity increase is nonspecific in that it occurs to a number of chemically unrelated drugs. It has been suggested that nonspecific supersensitivity results either from a change in drug receptor characteristics or a physiologic change in the tissue unrelated to the drug receptor. One method of testing which of these changes accounts for the supersensitivity would be to bypass the drug receptor by stimulating the tissue electrically. An enhanced sensitivity to electrical stimulation would be evidence that changes in the receptor do not account for the phenomenon.

The experiments were performed with vasa deferentia from guinea pigs. The preparations were set up in isolated organ baths containing a physiological salt solution at 37C. The smooth muscle of the vas deferens was stimulated to contract by pulses from a Grass S-4 stimulator. Stimulus parameters were adjusted to insure excitation of the smooth muscle rather than the nerve endings in the tissue.

The sensitivity of a pair of vasa deferentia was compared following denervation of one member of the pair. The operation was performed aseptically under ether anesthesia one week prior to the experiment. The denervation was accomplished by stripping the mesenteric investment leaving the vas deferens attached only at its prostatic and epididmyal ends.

Stimulus-response curves were constructed by a stepwise increase in voltage. Denervation resulted in a significant displacement of the voltage-response curve to the left of the control curve indicating the development of supersensitivity. This result provides strong evidence that a change in drug receptors is insufficient to explain the development of postsynaptic supersensitivity.

A Method for Obtaining Useful Information About Ionic Conductance Ratios from the Non-Nernstian Behavior of Cell Membranes

H. Gordon Minns, Medicine III

The living cell is bounded by a semipermeable membrane which maintains an electrical potential difference between the interior of the cell and its surroundings. The Nernst equation gives a satisfactory estimate of the potential difference across a semipermeable membrane provided it is permeable to a *single* ionic species.

Biological membranes are frequently permeable to more than one type of ion, ruling out the Nernst equation as a reliable predictor of transmembrane voltage. In fact, it was precisely the phenomenon of non-Nernstian behavior that led to the hypothesis that nerve cells are permeable to more than one ion. In view of existing mathematical models of cell membranes, it seemed likely that useful information about the relative importance of the various participating ions could be derived from observable deviations from "Nernstian behavior."

The analysis proceeded as follows: (1) a set of equations was derived to express the trans-

membrane voltage in terms of ionic conductances and equilibrium potentials, (2) an equation was derived which predicts the change in membrane voltage following a change in the extracellular concentration of one ionic species and (3) the equations were combined and solved for ionic conductance ratio in terms of deviations from the value predicted by step (2).

The resulting formula gives the conductance of the ionic species of interest, relative to the other membrane conductances:

$$\frac{g_1}{g_2} = \frac{\Delta V_M}{\frac{RT}{ZF} \ln \frac{[J_1]o}{[J_1]o'} - \Delta V_M}$$

Where g_1 and g_2 are ionic conductances, V_M is the change in membrane voltage, J_1 is the concentration of the ion of interest, R is the universal gas constant, T is the absolute temperature, Z is the valence of the ion, and F is Faraday's constant.

Effect of Hydration on Renal Nerve Activity and Renal Function

Joel R. Thompson, Medicine II

The objectives of this study were to determine the effects of fluid volume expansion (isotonic saline loading) on mean renal nerve activity (MRNA) and renal function. Six dogs (10-14 kg.) anesthetized with sodium pentobarbital (30 mg./kg.) were used. Mean arterial pressure (MAP), mean pulse pressure (MPP) and MRNA were recorded continuously. Urine volume (U_V, ml./min.) was collected in five-minute aliquots; and sodium (U_{Na}, μ Eq./min.) and potassium (U_K, μ Eq./min.) were determined in each sample using a flame photometer. Fluid volume expansion was induced by I. V. infusion through the femoral vein. An initial acute load (½ estimated blood volume in 30 minutes) and a sustaining load (0.5 ml./kg. body wt. for 60 minutes) were given and then followed by a 30-60 minute recovery period.

During the initial loading, MAP increased from 145 ± 10 to 160 ± 10 mm. Hg. (ΔP = 15 ± 2.5 mm. Hg.), MPP increased from 43 ± 10 to 65 ± 5 mm. Hg. (ΔP 22 ± 5 mm. Hg.), MRNA decreased from 32 ± 7 to 7.5 ± 2 μ volts (76%), U_V increased from 0.8 ± 0.8 to 3.1 ± 1.7 ml./min. (290%), U_{Na} increased from 170 ± 218 to 520 ± 310 μ Eq./min. (206%) and U_K increased from 104 ± 75 to 238 ± 266 μ Eq./min. (129%).

During the sustaining phase MAP and MPP leveled off (MAP = 150 ± 15 mm. Hg, MPP = 58 ± 10 mm. Hg.) at mean values above control. MRNA remained inhibited (mean = 7 ± 5 μ Volts). U_V continued to increase and peaked at 4.2 ± 1.4 ml./min, U_{Na} increased along with U_V (170 to 655 μ Eq./min.) for a maximum increase of 290%, U_K returned to near the initial levels at the end of infusion. During recovery all variables returned to or near pre-hydration levels within 60 minutes.

A direct relation was found between volume loading, MAP, MPP, U_V and U_{Na} in all three phases. Urine potassium increased abruptly at first then gradually fell to near control levels during the sustaining period. An inverse relation was observed between fluid volume expansion and MRNA. These data show that isotonic fluid volume expansion initially inhibits MRNA and maintains it at a low level with continued hydration. It is suggested that hydration induces an indirect renal denervation through baroceptor pathways; and under such conditions renal function reflects cortical tubular action as indicated by the large volume of dilute urine.

Gardner's Syndrome—Three New Families

David T. Murray, Medicine II

Gardner's syndrome, as first described by Eldon Gardner, in 1950, consists of osteomas, polyps of the colon, and subcutaneous tumors, inherited in an autosomal dominant pattern. Since that time, several variants of this syndrome have been reported. Many types of neoplasm have been reported in conjunction with familial polyposis. Included in this list are gliomas (Turcot's syndrome), carcinoma of the thyroid, carcinoma of the ampulla of Vater, carcinoma of the lung, transitional cell carcinoma of the bladder, carcinoma of the pancreas, fibrosarcoma, osteosarcoma, reticulum cell sarcoma, and leiomyosarcoma. Several subcutaneous manifestations have been seen, including pigmented nevi, café au lait spots, and desmoid tumors. Since there is an increased incidence of fibrous dysplasias among these patients, surgery may be complicated by fibrous adhesions, desmoid tumors, or fibrosarcoma.

Three new families are presented and some of the unusual features of Gardner's syndrome are noted.

Family "H. Z." The proband had the classic triad of Gardner's syndrome and several pigmented nevi before she died at the age of thirty-six of carcinoma of the ampulla of Vater. One of the siblings of the proband has had a thyroid nodule, while another has had a malignant melanoma and benign prostatic hypertrophy.

Family "R. C." The proband has had multiple sebaceous cysts, polyposis, carcinoma of the colon, and a retroperitoneal fibrosarcoma.

Family "L. M." The proband has had an osteoma, polyposis, carcinoma of the colon, and a malignant polyp of the stomach.

Microbiological and Immunological Analyses of Head and Neck Cancer Patients

Kent Thrush, Medicine II

A study was conducted into the effects of irradiation therapy on the oral microflora, secretory IgA, serum IgG, IgM, IgA, and IgD. The patient sample consisted of nine patients with cancer of the head and neck with two lung cancer patients as controls. Sample of serum, saliva and throat cultures was taken before, during and after the course of therapy at weekly intervals.

Secretory IgA was measured by electro-immunodiffusion and serum IgG, IgA, IgD and IgM were measured using commercial immunodiffusion plates. Throat cultures were streaked on appropriate agar plates and the different organisms identified.

There was a definite shift noted in the oral microflora from predominantly gram positive to gram negative in six of the patients. *Diplococcus pneumoniae* was found to be markedly reduced in almost all of the patients following treatment.

Those patients receiving head and neck irradiation showed a temporary and expected xerostomia. In most patients the production of secretory IgA did not appear to be significantly impaired by the radiation.

Six patients, including one of the controls, showed a rise in serum IgM during therapy or after surgery. All patients showed an increase in the level of serum IgG at some time during their treatment. Serum IgA and IgD levels remained fairly constant in all the patients during the study.

Changes in the oral microflora and secretory and serum immunoglobulins have been noted in patients receiving irradiation therapy or surgery, or both, for cancer of the head and neck. These changes and their significance are being further investigated in the hope that they will prove useful in the monitoring and care of such patients before and after surgery.

Hepatic Nucleic Acids and Protein Synthesis In Magnesium Deficiency

Timothy Looney, Medicine IV

Carbamyl phosphate (CP) is a substrate for both ornithine and aspartate transcarbamylase. In magnesium deficient rats a decreased activity of ornithine transcarbamylase has been reported and it was postulated that this finding was associated with an increased utilization of CP by aspartate transcarbamylase (ATC). This enzyme (ATC) catalyzes the first reaction in the pyrimidine pathway and changes in its activity could be expected to alter pyrimidine and nucleic acid metabolism and thereby indirectly affect protein synthesis.

To investigate this hypothesis, the activities of ATC and acid ribonuclease (RNAse) were measured in liver homogenates from magnesium deficient and control rats. The hepatic concentrations of ribonucleic acid (RNA), deoxyribonucleic acid (DNA), and protein were also determined as well as plasma albumin levels. Using conventional biochemical and statistical methods of analysis, the following results were obtained (body and liver weight in Gms., plasma albumin in Gms. per cent, others per 100 Gms. body weight):

	Depleted	*Control*	*P Value*
Body weight	283.±17.	321.±29.	<.01
Liver weight	8.9±1.1	8.4±0.4	NS
Liver protein	291.±31.	293.±18.	NS
Plasma albumin	2.3±0.2	3.6±0.7	<.001
ATC units	273.±42.	157.±21.	<.001
RNA-P (mg.)	2.47±0.30	1.87±0.21	<.001
DNA (mg.)	8.1±1.3	7.1±0.9	NS
RNAse (absorbency units)	46.3±27.	16.3±11.	<.02

In conclusion, induction of magnesium deficiency in rats produces significant changes in several aspects of pyrimidine and nucleic acid metabolism. The observed low plasma albumin levels may be the result of these abnormalities.

Autoregulation and Critical Closing Pressure of Cerebral Vessels

John R. Hitt, Medicine II

Autoregulation of cerebral blood flow is a subject of much debate. Little agreement exists as to what alters its operation and how this affects cerebral hemodynamics. It was the objective of this study to elucidate this area of interest and debate.

Utilizing the dye dilution technique, 15 Rhesus monkeys were used to obtain 1,352 observations (850 control—502 experimental) of cerebral vascular flow, volume, resistance, transit time, and sagittal sinus pressure. Corresponding monitoring was done of EEG activity and mean arterial and venous blood pressures. Determinations were made while respiring the animals at known gas concentrations both before and after rendering the animals hypoxic.

Control measurements obtained while fixing P_aCO_2 levels at: 35.8, 40.8, 46.9, 52.8 mm. Hg., clearly demonstrated that autoregulation was operative between 60-150 mm. Hg. perfusion pressure. At a low P_aCO_2 level (21.2 mm. Hg.), autoregulation was impaired. Corresponding CBF values obtained indicated that CBF increased with increases of P_aCO_2. Decreased vascular resistance was consonant in each case with increased CBF (Range: 1.239 mm.Hg./ml./min.).

Autoregulation was impaired (but not abolished) at low P_aCO_2 levels and following hypoxic insult. CBF became more pressure dependent as reflected in each case by decreased vascular resistance (Range: 0.459 mm. Hg./ml./min.).

In the control data, CBF was directly proportional to perfusion pressure between 15-60 mm. Hg. Below 15 mm. Hg., CBF abruptly dropped to zero flow and arterial resistance abruptly increased, indicating that the critical closing pressure of the vessels had been reached.

This study shows that autoregulation is impaired by hypocarbia and hypoxia. It has proven the existence of a critical closing pressure for cerebral vessels.

Special Article

Family Planning in West Virginia Public Health Clinics

N. H. Dyer, M. D., M. P. H., and Jack Basman, M. D.

In the 18th century, an English economist and sociologist, Thomas Robert Malthus, wrote an essay on "The Principles of Population." He suggested that population increased by geometric ratio and food production by arithmetic ratio and therefore poverty and distress cannot be avoided. This past century has brought many changes, one of which is that life expectancy at birth has been increased by some 20 years. Infant mortality has dropped and many infants with congenital and other disabling diseases have been kept alive. These and other factors have contributed to an expanding population, and many studies of population explosions reflect the ghastly consequence of over-population.

Fortunately, advances in family planning have taken place with the expansion of medical knowledge in the 20th century and couples can now have a choice in the number and spacing of their children. It has now become possible to use family planning as one of the means of improving the outcome of future pregnancies from the stand-point of the health of both the mother and child. Today's woman demands her right as an individual—the right to have some control over her body, and her health. As the woman has certain rights, so should the newborn. This means the right to be wanted, the right to be born whole and well, and the right to have continued care.

The provision of public family planning services on a large-scale basis may be looked upon as a newly developed comprehensive health service within West Virginia. The purpose of this paper is to review a series of related events and the role which has been taken by the West Virginia State Health Department in the planning, development and implementation of quality family planning services on a Statewide basis. Our immediate goal is to have the program operational in each of the 55 counties of the State, and to make services available to the estimated 116,000 eligible women of child-bearing age who desire or are in need of them. We have endeavored to establish clinic services which conform to the highest medical standards and assure the dignity, confidentiality and the right of free choice of method by the individual patient. Emphasis has continued to be placed upon family planning as a means of improving the health of mothers and children by proper child spacing.

The Authors

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Clinical experience has shown that: (1) The risks encountered in normal pregnancies may be considered higher than the complications found in the use of selected contraceptive methods; (2) Prematurity and mental retardation are decreased at least 2½ times if pregnancies are spaced at least two years apart; (3) Maternal and infant mortality and morbidity are decreased by allowing sufficient time between pregnancies for the mother to regain her strength. Therefore, our ultimate objective is to reduce the incidence of maternal and infant mortality and morbidity; prematurity with its frequently associated complications; and to improve the delivery of health care for the medically indigent. Our concept of family planning has included more than offering contraceptive services under medical auspices.

Background Events

Nineteen sixty-nine was an epoch year!

The first Public Health Laws in West Virginia concerning family planning and child spacing were adopted in 1966 and were so stated that "indigent persons eligible for family planning must be married and living with their spouses." The combined lack of funds and shortage of trained personnel limited program development during this early period to services which were token in nature and very few counties became interested or involved. In 1969, the Public Health Laws were amended and the phrase "married and living with their spouses" was deleted.

The President of the United States in his annual address to the Congress on July 18, 1969, focused national attention on Family Planning by stating:

"In 1830 there were one billion people on the planet earth. By 1930 there were two billion, and by 1960 there were three billion. Today, the world population is three and one-half billion and by the year 2000, it is expected to reach seven billion.

"In the United States, our rate of population growth is not as great as that of developing nations in Latin America, Asia and Africa. However, the present growth rate at one per cent per year is still significant.

"In 1917 the total number of Americans passed 100 million, after three full centuries of steady growth. In 1967, just half a century later, the 200 million mark was passed. If the present rate of growth continues, the third hundred million will be added in roughly a thirty-year period. This means that by the year 2000, or shortly thereafter, there will be more than 300 million Americans."

Plans were presented by the President to make family planning services available within five years, to all women in the United States who wanted but could not afford them, and $23 million dollars was appropriated for this purpose. The address was of special significance to West Virginia. In 23 states 90 per cent or more of the low income women in need of subsidized birth control were not receiving family planning help and West Virginia was one of these States.

During the summer of 1969, interest among the public health nurses was stimulated and prompted by a three-day workshop on "The Role of the Nurse In Family Planning" which was held at the West Virginia University School of Nursing. The workshops were repeated twice.

The Maternity and Infant Care Projects in Charleston and Morgantown incorporated family planning services and were designated as Demonstration Clinics. These have continued to function as centers for orientation and training of physicians, nurses or clinic personnel who are interested in family planning and would like to observe a clinic in operation under the direction of the West Virginia State Health Department.

A special grant from the Children's Bureau was awarded to the West Virginia State Health Department in June, 1969, for a Family Planning Pilot Project No. 777 to serve a five-county area (Hancock, Brooke, Ohio, Marshall, Wetzel) in the northern part of the State. The Pilot Project was later incorporated into the present program referred to as the West Virginia Statewide Family Planning Project No. 777.

Initial steps were taken by the State Health Department in March, 1970, to meet with representatives of all agencies who were interested or involved in family planning in West Virginia. An Inter-Agency Family Planning Council was formed to coordinate efforts and avoid duplication in providing family planning services. In July, 1970, the Statewide Family Planning Project was funded by a $610,706.00 grant from the National Center for Family Planning Services, plus $203,569.00 in matching State funds. This allowed us to move from the original five-county Pilot Project No. 777 and to extend services to all counties in the State.

Major efforts have been made to keep sight of the individuals being served and the goal to deliver quality services conforming to the highest medical standards. Attempts to translate these goals into agency actions have taken the following form:

Administration of the Statewide Family Planning Project

West Virginia's topography, related transportation problems and lack of professional manpower in many areas have made it imperative that the overall Project be directed on an administrative level from a fixed base in Charleston, where a comparatively larger source of manpower, both medical and administrative, is available. To implement the statewide program, a Core Group-Team concept was initiated to provide strong leadership and diversified expertise at the State

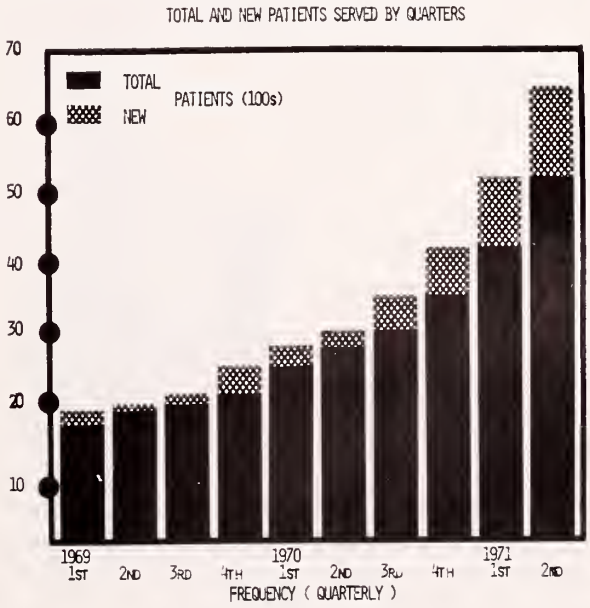

Figure 1.

level. The Core Group consists of the State Director of Health, the Project Director, the Family Planning Medical Coordinator, two pediatricians, two part-time obstetricians, a social worker, the Director of the Division of Maternal and Child Health, the Director of the Bureau of Public Health Nursing, the Director of the Nutrition Bureau, and the Director of the Bureau of Public Health Education. The rather broad base of the Core Group, using several disciplines and involving some of the State Health Department Bureaus outside the Division of Maternal and Child Health, is intended to help this Project integrate family planning with other activities of the State Health Department. Selected members of the Core Group are associated with the West Virginia Family Planning Advisory Council, to help coordinate services of the Project with family planning services offered by other agencies. All aspects of planning and implementing the Project have utilized the Core Group approach. A combination of Core Group, fixed base demonstration clinics, and a traveling team is flexible enough to assist areas needing extensive help as well as areas needing minimal direct assistance. This combination has enabled us to attain some degree of uniformity regarding philosophy, policy standards and accessibility to the public of the various local family planning clinics. In order to take full advantage of the flexibility inherent in the Project design, there is a process of continued evaluation, assessment and adjustment with directives for field operations being sent out from the State level to all participating clinics.

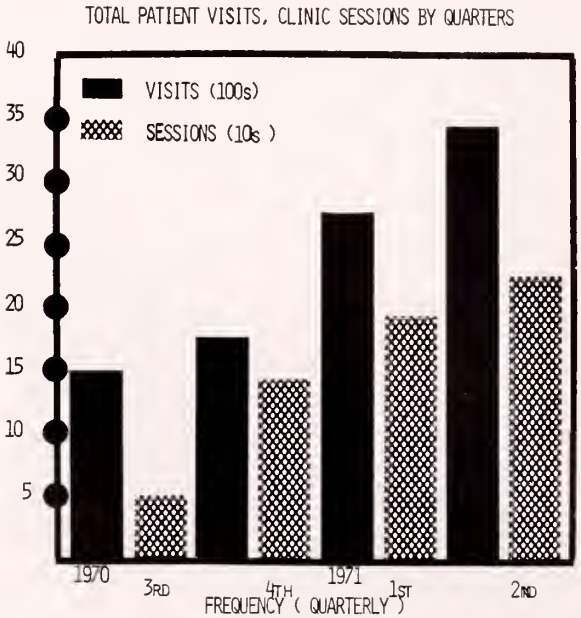

Figure 2.

The traveling team has functioned primarily as an orientation and training unit to date. This became essential because of the need for training of clinic staff. Presently the team consists of: a social worker, a health educator, a licensed practical nurse, and a statistical clerk. Their individual functions are outlined below:

1. *Social Worker*: The clinic staff must be aware of the referral procedures to other agencies for services needed by the patient in other areas as well as health. In a few instances, we are fortunate in having social workers employed specifically for family planning. However, in most cases, the county health nurse must assume this responsibility. We have found that referrals are utilized to a greater degree and that better use of community resources is evident when a close relationship between the county health department and various agencies is fostered.

2. *Health Educator*: The clinic staff must be prepared to provide each patient with a basic understanding of conception, contraception and clinic services. An individualized program of education must be developed for each county taking into consideration their specific and individual needs. The team health educator must work to provide adequate community and patient education for each clinic. When working with the various clinics, he must assess the attitude of the community toward the program, decide the method which can be best employed to gain support and participation in clinic services, and aid the clinic staff in developing this type of program. It is now possible to begin community education before a clinic opens and to provide a clear understanding of both objectives and services. This approach has contributed to effective community participation and acceptance.

3. *Licensed Practical Nurse*: The team's licensed practical nurse serves as an advisor on clinic set-up, procedure and other duties. Since her training in family planning has been within the clinic setting, she has been able to offer assistance regarding the most efficient use of facilities for various procedures, time-saving techniques, and to give the nurse an idea of what to expect in the way of time and scheduling of patients.

4. *Statistical Clerk*: The statistics kept by each family planning clinic are invaluable tools when attempting to evaluate the effectiveness of the services offered. By training the clinic staff responsible for these records, we hope to gain reliable and accurate data regarding family planning. This is extremely helpful in evaluating the growth of the program by county and characteristics such as age, education and parity. It has also been useful in the approach to planning community education.

An overall evaluation of the team approach seems to be that this direct contact is stimulating more interest and resulting in high quality services among the clinics. This also allows a total appraisal of the clinic from a vantage point of view. Since each member concentrates on a specific area, we are gaining an in-depth picture of each county's clinic services following a few sessions. When orientation has been completed, the team functions as an advisory group to the clinics; and will also focus upon expansion of community outreach and agency participation in each county.

Implementation of Family Planning Clinics

The Public Health Laws of West Virginia stipulate that family planning cannot be established in any county under this program without the approval of the local Boards of Health. Therefore, program implementation has required an initial contact with the county health officer and staff regarding the inclusion of family planning in their existing health programs. All phases of the program are discussed and a beginning plan formulated to meet each county's specialized needs. The active support which we have gained from the public health officers and public health nurses has been essential for success of the program.

In 1964, the Kanawha-Charleston Health Department, under the leadership of Dr. Page H. Seekford, was the earliest county organization in the State to initiate and incorporate family planning services with ongoing health programs. Success of the pioneer clinics in Chelyan and South Charleston emphasized the need for developing and implementing similar programs in other areas of the state. Contact of local physicians and hospitals has been undertaken to ensure that each has an understanding of what the family planning program may offer to their community. Contractual agreements have been reached with several hospitals in the metropolitan areas to establish clinic services on a regular basis. In December 1970, an agreement was consumated with the Southern West Virginia Regional Health Council to provide family planning services within the 10 most southern counties of the State. The group is working closely with the County Health Departments to enlarge and improve the area health services and the staff is in an excellent position to implement the Family Planning Services.

Many of the West Virginia health departments are not in a position to deliver the clinic services without additional staff and equipment. An effort to help the Health Departments has been achieved through renovation of facilities and provision of the necessary equipment for the waiting, examination, and dressing areas. The essential nursing, clerical, and patient supplies and a supportive staff on an hourly basis have also been provided without additional cost to the county. This has contributed to the quality of services and has promoted an atmosphere of dignity, friendliness and respect for patient confidentiality. The county health department personnel, in consultation with the State staff, have evaluated their needs for equipment and supplies and these are provided through a central warehouse in the Charleston area.

The first family planning session is conducted after the clinic has been adequately equipped, the staff trained, and the patients scheduled. The clinics are then given continued supportive services from the State staff in terms of supplies, further education and community contacts. Our experience to date would indicate that the counties will continue to offer and expand family planning as an essential component of their community health services.

Services Provided in Public Health Family Planning Clinics

An initial medical history is obtained on each new patient and a complete physical examination, including breast and pelvic examination is performed and recorded by the clinician. It is the policy of the clinic to include routine laboratory procedures such as hemoglobin and hematocrit, urinalysis for sugar and protein, serology and pap smear. A routine culture for gonorrhea has been incorporated by use of the Transgrow medium.

The clinician is encouraged to discuss his findings with the patient and to make the appropriate referral or recommendations for health problems which may be found in the process of examination. Resources are available for infertility services and referral may be arranged as necessary. A contraceptive method which is compatible with the patient's health status and expressed desire should be prescribed whenever possible. A variety of contraceptive methods is made available to the clinics and include: oral contraceptives, intrauterine devices, diaphragms, rhythm, contraceptive foams, jellies and condoms. It is the clinician's responsibility to provide specific instructions regarding the prescribed method of contraception and to inform the patient about possible side effects of the medication or device. Sterilization and abortion as methods of family planning are expressly excluded from this program by State law.

Group and individual instruction is offered by the public health nurse and it is also the duty of the nurse to interview the patient at the time of dispensing medication in order to determine

FIGURE 3.

COMPUTATION USING DRYFOOS-POLGAR-VARKY FORMULA ** OUTLINED in "NEED FOR SUBSIDIZED FAMILY PLANNING SERVICES, 1971"—FAMILY PLANNING PROGRAM/OFFICE OF ECONOMIC OPPORTUNITY**

County	I Women 18-44*	II Percentage of Families with Income Below $3,000**	III Medically Indigent Women of Child Bearing Age I x II	IV Adjusted for Need of Service IV x 0.75	V Patients Served As of June 30, 1971	VI Percent Served	VII Rank
Barbour	2,280	52.8	1,204	903	60	6.64	18
Berkeley	6,143	26.0	1,597	1,198			
Boone	4,097	39.8	1,631	1,223			
Braxton	1,839	55.0	1,011	758	5	0.66	35
Brooke	5,316	13.5	718	539			
Cabell	20,175	24.3	4,903	3,677	335	9.11	15
Calhoun	1,053	55.5	584	438	25	5.71	22
Clay	1,358	55.1	748	561	159	28.34	3
Doddridge	852	49.5	422	317			
Fayette	7,353	41.0	3,015	2,261	86	3.80	26
Gilmer	1,560	54.7	853	640			
Grant	1,365	64.0	874	656			
Greenbrier	5,252	43.7	2,295	1,721	205	11.91	10
Hampshire	1,827	51.2	935	701	6	0.86	34
Hancock	6,939	9.6	666	500			
Hardy	1,412	53.9	761	571			
Harrison	11,908	26.6	3,168	2,376			
Jackson	3,737	35.0	1,308	981	63	6.32	21
Jefferson	3,955	32.6	1,289	967	11	1.14	32
Kanawha	42,560	21.4	9,108	6,831	2,172***	31.80	2
Lewis	2,815	43.2	1,216	912	96	10.53	11
Lincoln	3,025	54.9	1,661	1,246			
Logan	7,731	32.6	2,520	1,890	65	3.44	28
McDowell	7,863	41.4	3,255	2,441	51	2.09	30
Marion	10,722	25.3	2,713	2,035	101	4.96	23
Marshall	6,398	19.8	1,267	950	75	7.89	17
Mason	4,249	34.1	1,449	1,087	72	6.62	19
Mercer	11,145	36.8	4,101	3,076	369	12.00	9
Mineral	3,980	30.6	1,218	914	28	3.06	29
Mingo	5,163	46.1	2,380	1,785	20	1.12	33
Monongalia	14,060	29.6	4,162	3,122	1,503	48.14	1
Monroe	2,132	56.6	1,207	905	87	9.61	13
Morgan	1,446	41.0	593	445			
Nicholas	3,646	43.3	1,579	1,184			
Ohio	11,531	20.6	2,375	1,781	393	22.07	4
Pendleton	1,075	60.3	648	486			
Pleasants	1,212	31.3	379	284			
Pocahontas	1,260	47.0	592	444			
Preston	3,941	46.4	1,829	1,372	47	3.50	27
Putnam	5,112	30.4	1,554	1,165	110	9.43	14
Raleigh	11,611	39.9	4,633	3,475	139	4.00	25
Randolph	4,015	41.9	1,682	1,262	82	6.50	20
Ritchie	1,462	45.2	661	496	49	9.88	12
Roane	2,097	48.6	1,019	764	34	4.45	24
Summers	1,951	54.4	1,061	796	101	12.69	8
Taylor	2,157	44.7	964	723			
Tucker	1,096	52.1	571	428	68	15.89	7
Tyler	1,619	40.9	662	497			
Upshur	3,580	46.7	1,672	1,254			
Wayne	6,790	37.8	2,567	1,925	8	0.42	36
Webster	1,470	57.7	848	636			
Wetzel	3,395	29.1	988	741	160	21.59	5
Wirt	589	49.3	290	218	19	8.72	16
Wood	15,971	20.1	3,210	2,408	462	19.19	6
Wyoming	5,239	33.6	1,760	1,320	16	1.21	31
TOTAL	302,529	32.6	96,376	72,286	7,279	10.07	

* 1960 Census Population—advance report

** 1960 Census

*** Includes 783 Patients served by Kanawha-Charleston Health Department Program

**** The DPV formula attempts to approximate the number of women in need of family planning by using available socio-economic and demographic information, combined with relevant findings of social and biological research. It estimates the level of services needed but it does not define eligibility for services. Those in need of service are not necessarily limited to the age group (18-44) and income (below $3000) group, even though the formula employs the above criteria of age and income.

the need for further clarification of the physician's instructions. The recommended routine frequency of clinic revisits is included in the Operational Procedures Manual for Family Planning and Child Spacing Clinics which was published August 1, 1970, by the Division of Maternal and Child Health. This set forth the basic Standards and Guidelines for Clinics established under the Statewide Family Planning Project. Authorized procedures for treatment and management of patients who develop a complication as the result of a contraceptive method adopted in the clinic have been directed to the health officer, private physicians, and to the local hospital administrators.

We have found that the program is serving an important role in secondary prevention as well as that of a primary preventive health service. As a thorough physical examination is performed on each patient, it is becoming an important means for early diagnosis of other related health problems. Statistics regarding this area of service were recently compiled and show that approximately 1,000 referrals were made during the past year for other health and related problems. The most prevalent conditions found were:

Suspicious Pap smears	Emotional problems
Vaginitis	Hypertension
Vulvitis	Obesity
Cervicitis	Malnutrition
Cervical Polyps	Anemia
Uterine Tumors	Diabetes
Ovarian Tumors and Cysts	Hypoglycemia
	Venereal Disease
Breast Pathology	Dental problems
Renal Conditions	Cerebrovascular problems
Cystitis	
Thyroid and other glandular conditions	

For treatment of those conditions diagnosed or suspected as a result of the family planning medical history and examination, the patients were referred to private physicians, hospitals or clinics, existing Health Department services and to other State, local and Federal agencies and civic groups.

Since primary medical and hospital care is limited in many areas of the State, this auxiliary service of the family planning program becomes an essential part of the comprehensive health plan for West Virginia.

Education

Since family planning in public health is a relatively new service, interest in education has been expressed among the professional staff in addition to the general public. Physicians and nurses have participated actively in workshops, demonstration clinics and lectures which have been scheduled for this purpose. A special conference for physicians on family planning was sponsored by the State Health Department and conducted at the Charleston Memorial Hospital on May 15, 1971. This was well attended by public health officers and clinicians representing 27 areas of the state. The educational programs have dealt with a variety of subjects including new developments in contraception, education and counseling, clinical procedures and discussions, oral contraception and management of new intra-uterine devices. It is hoped that similar programs and conferences may be held in various areas of the State and at different times in order to accommodate all interested physicians.

The general public has also expressed a desire for information regarding family planning. They are no longer relegated to ineffective methods of contraception. A new awareness of the health, social and economic advantages of the planned family has emphasized the need for education in the community as well as within the clinic setting. This phase of the program is, therefore, one of the most essential components. If family planning is to be utilized fully and effectively, the consumers of the service must have a complete and accurate understanding of the advantages of the planned family, the various methods available and their effectiveness, and the correct use of each method. When this is not accomplished, frustration, misunderstanding or contraceptive failure may be the end result.

To accomplish effective education, a variety of visual aids has been made available to both patients and clinic staff. These include films and filmstrips, flip charts, literature and reference materials. They may also be obtained by interested groups and individuals on a loan basis.

Progress from July 1, 1970, to July 1, 1971

As of July 1, 1971, the Statewide Family Planning Program has been in operation one full year. The statistics shown here provide a profile of the rapid growth and interest in this new developing community health service. As demonstrated, the number of patients participating has increased from 3,306 to 7,279 (Figure 1); the clinic sessions have expanded to 76 per month; and the number of active clinics has increased to 40 (Figure 2).

Even so, the accompanying tables illustrate the large task facing this program in the coming year. Using the Dryfoos-Polgar-Varky formula, as an indicator of need, the best estimate of the per cent of need being served is 10.07 (Figure 3).

Future Program Expansion and Problems

Due to the response of both professionals and consumers to this service, rapid and continued growth is anticipated. Because of this, additional manpower and facilities will be required, and as in all health programs, the expansion will be partially determined by the availability of funding and qualified physicians. It is hoped that through new and innovative programs such as this, physicians will become more interested in participating in public health activities. Therefore, it is the medical profession who will have the greatest influence on the continued growth of family planning services in West Virginia.

We hope to accomplish future expansions of the program by directing efforts within the areas outlined below:

1. Increased number of clinic sessions conducted in the present setting.

2. Development of satellite clinics and the use of portable equipment.

3. Establishment of additional evening and Saturday sessions where desirable and feasible.

4. Operation of one or more medical Mobile Units in isolated areas.

5. Development of contractual programs with clinics, private group practices and private physicians.

6. Coordination of family planning with established health services in other State and Federal Institutions.

7. Improvement of transportation programs through local services.

8. Support of the legislative changes which would improve family planning health services in West Virginia.

9. Support of programs for the recruitment and training of all health manpower and extended health facilities in the state.

10. Continued reassessment of program goals, methods and procedures.

Summary

The West Virginia Statewide Family Planning Project was initiated in July, 1970. After one year of program implementation, 40 of the State's 55 counties have established Family Planning Clinics which are well accepted by the target group. It is premature to evaluate statistical evidence about its primary preventive effects; however, the scientific evidence of such an effect is an undeniable fact. The list of the cases detected and referred for definitive diagnosis emphasize the secondary preventive aspects of the program. We have been refunded for the 1971-72 grant period and with the continuing cooperation of the public health officers, public health nurses, the medical profession, and other agencies involved in providing health services, we hope to implement those goals which have been outlined for future expansion. In this manner, it is hoped that family planning services will become available to those women in West Virginia who want but cannot afford them.

On Meetings

Some years ago, we wanted to have a meeting for the sole purpose of voting on a single issue. It meant driving many miles, a 6 o'clock social hour, 7 o'clock dinner, the vote, driving home, and a lost evening. So we met by telephone instead and settled the whole thing in three minutes.

Today we drive or ride or fly thousands of miles and spend hundreds of dollars and crowd dozens of hotels to listen to lectures that are going to be published anyway, and usually in journals to which we subscribe. And the author will send you a reprint.

I predict, with all the ease of a man who will not be there to see, that in the future, the speaker will stay home and so will his audience. You do not have to see the lecturer to hear him. And now, with telephones that let you see, and with closed-circuit television, staying home may be better than going there. Anyway, you can always read the article, and cut it out or get a reprint.

The only thing is that, for a doctor, there's nothing like getting out of town, and a meeting is as good an excuse as any.—*F. C., in Nebraska State Medical Journal.*

Electrocardiogram of the Month

Two-Step (Master) Exercise Test

Donald K. Chung, M. D., and Edward K. Chung, M. D.

TWO-STEP exercise electrocardiogram test was performed on a 46-year-old man with exertional chest pain. The diagnosis of angina pectoris was confirmed because the test was found to be positive.

The control tracing A is within normal limit. The tracings B, C and D show marked S-T segment depression and T wave abnormality, diagnostic of positive exercise test.

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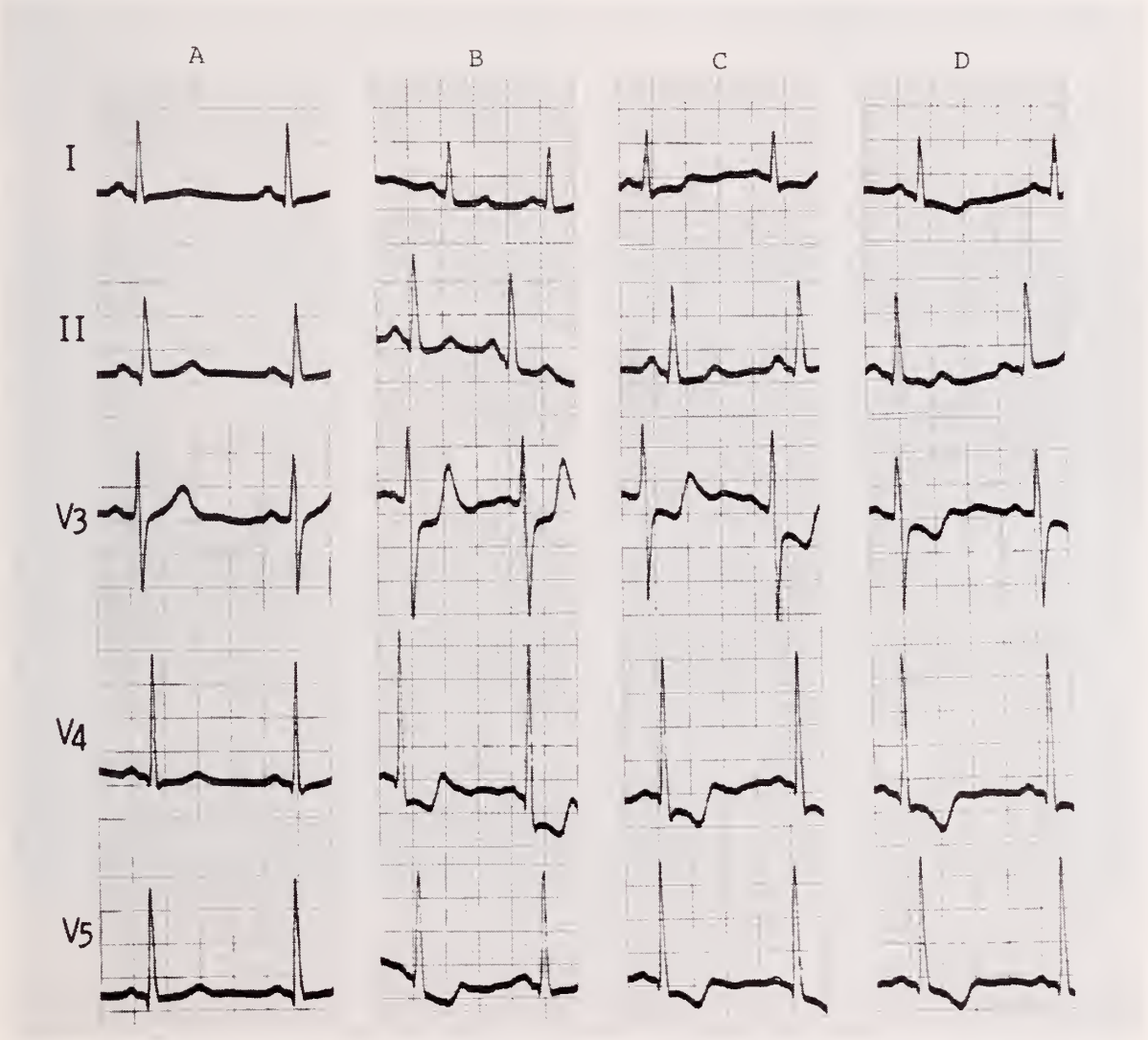

Figure 1: Tracing A: Control: Tracing B: Immediately following exercise; Tracing C: Two minutes following exercise; Tracing D: Six minutes following exercise. Note marked S-T, and T wave abnormalities in tracings B, C and D.

Criteria for Positive Exercise Test Include: (1) Ischemic S-T segment depression (horizontal S-T segment depression) of 1 mm. or more.

(2) Functional S-T segment depression of 2 mm. or more during and after exercise.

(3) Alteration in the direction of the T waves (from upright to inverted or vice versa).

(4) Appearance of frequent ectopic beats particularly ventricular in origin.

Criteria for probable positive exercise test include: (1) Ischemic S-T segment depression of 1 mm. or more in occasional cycles with slightly less depression elsewhere.

(2) Functional S-T segment depression of 2 mm. or more during exercise only.

(3) Flattening or biphasic T waves.

(4) Appearance of cardiac arrhythmias such as A-V block, bundle branch block, etc.

(5) Inversion of U waves.

Comment

It is well documented that a normal resting electrocardiogram does not exclude ischemic heart disease. In fact, in patients with angina pectoris, the resting electrocardiograms may be normal in about 70-75 per cent of the cases. The purpose of the two-step test is to increase, by means of exercise, the demand placed on the coronary blood supply to the myocardium. If the ability of the coronary blood flow to adjust to the increased needs of the heart is limited because of pathologic narrowing of the coronary arteries, a relative ischemia and/or injury may be induced by the exercise. As a result, various electrocardiographic abnormalities, particularly the S-T segment depression, will be produced.

The two-step exercise test, described initially by Master, involves usually 15 to 25 trips, up and down a specifically designed two-steps (each 9 inches high), performed within 1½ minutes.

The number of trips will vary with the age, weight and sex of the patient according to the standard table. The exercise is stopped promptly if the patient experiences chest pain or any unusual discomfort. The test is performed under a physician's presence when there is no evidence of recent or impending myocardial infarction or any other acute symptoms. If the single two-step test is negative, a double two-step test is often indicated. For this reason, many patients require double Master's test to confirm or exclude angina pectoris. When the double test is required, the number of trips is doubled and the test is to be completed in 3 minutes instead of 1½ minutes. The post-exercise electrocardiogram should be recorded immediately upon a termination of exercise, preferably within 30-40 seconds and tracings should be repeated at 2-, 4-, 6-, and 10 minute intervals thereafter or until the ECG has returned to normal.

Bricks in the Toilet

For years the water table in Arizona has been dropping. In Needles, California, water is brought to town by tank car and signs everywhere exhort citizens to save it. In the rest of the state as in many parts of the arid Far West, water rights are specific and essential to most land purchases.

Here in the East it takes a considerable drought to ban the watering of lawns in the late summer. Yet everywhere the American standard water closet delivers on flush about four gallons of water to wash away even picayune urinary contributions. Other peoples outdo even the Scots and Arabs and use no water at all.

Ecologists more and more urgently admonish us for our prodigalities with water. The world's fresh water could soon be in dangerous short supply if present usages continue. What can the average man do but tend to leaky taps, use outside water wisely and perhaps bathe less frequently?

There is something to be done right now with the water closet, no matter what the season. Richard Saltonstall's new book *Your Environment and What You Can Do About It* advises putting two bricks in the tank to maintain its water level, yet reduce the amount of flush. "New Hampshire Tomorrow" in one of 38 informative "Environmental Fact Sheets" advises one brick. The urgency for economy will vary perhaps with a person's habits or dwelling place but the price is cheap enough. Take your pick—one brick or two.—*Massachusetts Physician.*

X-Ray Case of the Month

Julian Gasataya, M. D., General Practitioner, Lumberport; and
Ray Harron, M. D., Radiologist, Bridgeport

DR. JULIAN GASATAYA:

This 45-year-old white male had non-specific upper abdominal complaints including some fatty food intolerance. Three gallbladder series were done which all showed non-visualization. A GI series was done.

DR. RAY HARRON:

The GI series shows a rather marked dilatation of the duodenal loop and the proximal jejunum. These findings suggest scleroderma or Crohn's Disease.

DOCTOR GASATAYA:

Approximately two months later the patient was brought to the hospital for elective cholecystectomy. This procedure was accomplished and cholelithiasis and chronic cholecystitis were found. Approximately one week after surgery the patient's abdomen was noted to be distended and x-ray films were obtained.

DOCTOR HARRON:

Flat and erect films of the abdomen show marked distention of the small bowel and large

Figure 1.

Figure 2.

bowel over to the distal transverse colon. The erect films show stair-step fluid levels. Diagnosis of mechanical obstruction was made.

Doctor Gasataya:

The patient was taken to surgery. Upon opening the abdomen the markedly distended bowel was noted. The small bowel was discolored suggesting infarction. The discolored bowel was resected and anastomosis made and the patient left the operating room in good condition. The pathology report on the resected small bowel was Crohn's Disease.

Figure 3.

USE CHRISTMAS SEALS

FIGHT EMPHYSEMA
TUBERCULOSIS AND
AIR POLLUTION

THE WEST VIRGINIA STATE MEDICAL ASSOCIATION
THE WEST VIRGINIA THORACIC SOCIETY
THE WEST VIRGINIA TUBERCULOSIS AND RESPIRATORY DISEASE ASSOCIATION
and
THE WEST VIRGINIA UNIVERSITY MEDICAL CENTER

are pleased to announce

"The Fifth Annual Mid-Winter Conference On Chest Diseases"

(New Developments in Lung Diseases)

at the

Daniel Boone Hotel
Corner Washington & Capitol Streets
Charleston, West Virginia

Sunday, January 30, 1972
10 A. M. to 4 P. M.

PROGRAM will cover care of the tuberculosis patient in a general hospital; drug management of tuberculosis; training programs in emergency treatment of acute respiratory diseases; the role of a respiratory intensive care unit, and the value of lung scans in clinical medicine.

FACULTY will include Joseph H. Bates, M. D., University of Arkansas; L. W. Stringer, M. D., Bowman Gray School of Medicine, Wake Forest University; Terring W. Heironimus, III, M. D., and William B. Hunt, Jr., M. D., both of the University of Virginia; William K. C. Morgan, M. D., West Virginia University, and Steven A. Artz, M. D., and James K. Sexton, M. D., both of Charleston.

PROGRAM CO-CHAIRMEN: Ralph H. Nestmann, M. D., and Joseph T. Skaggs, M. D., both of Charleston.

REGISTRATION FEE: A fee of $10 will be charged all registrants except nurses, medical students, interns and residents. Fee will include admission to group luncheon. Advance registration is requested. Please make checks payable to "WEST VIRGINIA STATE MEDICAL ASSOCIATION."

ACCREDITATION: Attendance at course will be acceptable for credit toward "The Physician's Recognition Award" of the American Medical Association. The course has been approved for five hours of credit by the American Academy of Family Physicians.

OVERNIGHT ACCOMMODATIONS: Physicians wishing to spend the night in Charleston should communicate directly with the reservation manager of the hotel or motel where they wish to stay.

FOR ADVANCE REGISTRATION, please complete the form below and mail to: WEST VIRGINIA STATE MEDICAL ASSOCIATION, POST OFFICE BOX 1031, CHARLESTON, WEST VIRGINIA 25324.

Please register me for the Fifth Annual Mid-Winter Conference on Chest Diseases in Charleston on Sunday, January 30, 1972. My $10.00 registration fee is (is not) enclosed.

Name (please print) _____ *Specialty* _____

Address _____ *City* _____

A message from . . .

The President

BLOOD IN THE SNOW

NOTHING would be more satisfying to this grateful, contrite and joyful heart of mine, than to wish each of you the Best of Holidays and extol the virtues of living in these hills at this time of year.

We do this with all sincerity. With like sincerity, however, we feel compelled to write an end of the year view as seen through the eyes of your President.

In the past few months, we have talked to, listened to and commiserated with medical leaders, politicians and planners about the future. These daily exchanges have left us with a sad conclusion at this most happy time of year. The conclusion is that the time-frame of social change and political action, with resultant ill-conceived and inappropriate legislation, has been advanced to a critical point. We are witnessing a trickle of blood in the snow. A trickle of the life blood of this sorely wounded country of ours.

Our reason is that those who seriously want to cure this country's ills are applying the same formulae that have created our social dilemma. The "crazies" have considerable momentum and refuse to accept other points of view. We are given final conclusions and asked to comment.

We hear screams about "scare dollars" and are told that billions in taxes will be spent to save those dollars. We hear oft-repeated phrases designed to sell a product . . . poorer medical care at greater cost. The total push for absolute federal control of medicine—the physician, the patient he serves, all those who pay for medical services—is here. Any means justifies the end. We are being subjected to extreme "liberal" influences, which refuse to acknowledge the need for a blend of philosophies for the good of our country. The end point of this brand of liberalism is anarchy. Anarchy that is causing the blood in the snow.

We have few material needs on our Christmas list. We would like a sockful of sanity for our country. We pray for Divine Guidance to prevent the trickle from becoming a rivulet.

Harry S. Weeks, Jr. M.D.

HARRY S. WEEKS, JR., M. D., *President*

THE WEST VIRGINIA MEDICAL JOURNAL

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EDITORIALS

LABOR AND MEDICINE

It has been traditional, if not actually a knee-jerk reflex, for Labor and Medicine to oppose one another politically and legislatively. There is no denying that there are certain irreconcilable differences between us, but, unfortunately, in espousing differences what should have been our common interests have gotten lost.

It must somehow favorably impress the membership for union leaders to present themselves as ogres. We are told that not all are that way and, in spite of the fact that some might not want it to leak out, a few are quite decent, even reasonable men.

If one starts with the proposition that Labor has as its primary goal the best interests of union members, and Medicine has as its primary goal good health care for patients, certain common aims can become apparent: we are both interested in industrial safety, highway safety and home safety; both support immunization programs and other public health measures for the control of communicable diseases; both support ecological programs to control water, air and noise pollution; both are interested in mental health programs and the control of factors leading to mental stress and mental illness; both have an interest in the availability and safety of leisure time activities and facilities.

There are Labor leaders taking premature delight in what they suppose is their great victory over powerful organized Medicine as they watch our steady progress toward some form of national health insurance. They could be in the same position as the barracuda closing in on its prey failing to notice the bristling teeth of the shark about to snap shut on its tail.

Politically, Labor has been and remains powerful. It might even be said that Labor's political power is now at its zenith. It is clear, however, to anyone willing to look at political realities, that Labor's high-flying eagle is soon to have its wings clipped. The United States Supreme Court is becoming filled with justices of whom Labor does not approve. Even Congressmen getting the great bulk of their support from Labor are becoming uncomfortable at intimidating threats which ensue at the slightest deviation from Labor's political goals. The conviction is prevalent, almost universal, among legislators that Labor is too powerful legislatively, too intimidating politically and too disruptive economically.

It has occurred to Congress that strikes are no longer directed against individual companies or even single industries; they are directed against the general public. Congress knows it is its duty to protect the general public in its peaceful pursuits from disruptions or threats of disruptions no matter the source.

Labor is looking at the early storm clouds of its political troubles. Medicine has weathered this storm and though our sails are slightly tattered, we sail on. Congress has not acted on a national health plan but Labor's plan is least likely of all those submitted to get serious consideration. We don't need Labor's support or even an armistice in our national legislative activity. It seems unlikely that Labor will ask for or need our support in their nascent troubles. The union membership and the patient public might benefit, however, from some efforts at accommodation between the two of us in the common pursuit of objectives about which we have no quarrel.

PHYSICIANS IN WEST VIRGINIA

An informative article, "West Virginia Physicians—A Brief Statistical Evaluation," by Dr. J. Hugh Wiley appeared in the September 1971 issue of *The Journal*. This article among other things considers the physician to people ratio in West Virginia to that of the country at large. He reminds us that between 1960 and 1970 West Virginia had the greatest percentage loss (8.8 per cent) of population of all the states. In 1960 the ratio was one physician to 1,101 people and in 1970 the ratio was one physician to 1,105 people. It is rather singular that with the marked decrease in population during the 10 years the ratio changed so little. Presumably these figures show that there is a shortage of supply of physicians in West Virginia, for the theoretical ratio suggested by the American Medical Association is one physician to 711 people.

Doctor Wiley emphasizes that the ratio of foreign graduates practicing in West Virginia has increased markedly during the past ten years. He states that it is estimated that in 1960 less than 10 per cent were foreign graduates, whereas in 1970 this figure rose to more than 50 per cent. In this connection it is of interest that the *Journal of the American Medical Association* (207:1295, 1971) states that approximately one of every six physicians currently practicing in the United States has been educated in a foreign school. The following numbers of five different countries are listed: from the Philippines, 6,971; from West Germany, 3,540; from India, 3,246; from Italy, 3,108; and from Great Britain, 2,656.

Mention is made that last year (1970) 100 new members joined the West Virginia State Medical Association; of these only 36 per cent graduated in the United States, while 64 per cent were foreign graduates, and 20 per cent of the latter were from the Philippines.

The author points out that the School of Medicine of West Virginia University plans in the relatively near future to graduate 75 students each year. He believes that when this obtains, and if the average physician practices for 30 years, the State would theoretically maintain the proper number of physicians. Practically speaking, however, this probably would not obtain, because all the graduates would not remain in the State to practice. Presently about 40 per cent remain or return. This is a fair percentage; other states have had about the same experience in regard to the number of their graduates who remained in the state.

It should be pointed out that this factor was recognized when the Medical Center was planned, namely that most all of the medical graduates would remain in the State. In point of fact, it undoubtedly is well for a certain number of graduates from other medical schools and from other areas to practice in West Virginia, for they bring in a somewhat different point of view due to their training and former environment.

Be all as it may, Doctor Wiley rightfully stresses that although we in West Virginia are producing our share of physicians we are not presently obtaining the services of enough of these physicians. His point is well taken indeed, and every effort should be made by the faculty of the School of Medicine and in fact by all physicians and other concerned citizens as well, to encourage our graduates to practice their profession within the state.

Health Care Payments

Private health insurers paid a record $17.3 billion in health insurance benefits to policyholders last year, the Health Insurance Council reported recently.

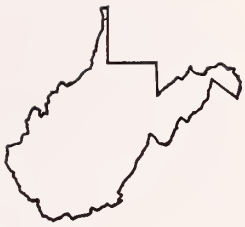
This was an increase of nearly $3 billion over the previous high set a year earlier. Insurance companies, said the Council, paid $9.1 billion of the 1970 total as against $7.6 billion a year earlier.

The totals, part of the HIC's 25th annual survey of the extent of health insurance in the nation, showed that nearly $9 billion went for hospital bills, about 5½ billion for surgical, medical and dental expenses, and almost $2 billion for disability benefits.

The increase from 1969 in hospital payments was more than $½ billion, while the rise in surgical, medical and dental expense was more than $1 billion. There was about a $¼ billion increase in disability benefits.

The HIC report used data from insurance companies, government agencies, and Blue Cross, Blue Shield, and medical society plans.

GENERAL NEWS



Fall Meeting of the Council In Charleston on Nov. 14

The fall meeting of the Council was held at the Holiday Inn No. 1 in Charleston on Sunday, November 14, with the Chairman, Dr. George R. Callender, Jr., of Charleston, presiding.

Doctor Callender introduced the following new members of the Council who were elected during the annual meeting at The Greenbrier in August: Drs. Charles E. Andrews of Morgantown and George V. Hamrick of Charleston. He also introduced Mr. James S. Imboden of Columbus, AMA Field Representative.

New Member of Publication Committee

It was announced that the term of Dr. William L. Cooke of Charleston, as a member of the Publication Committee, would expire on December 31, 1971. Also, that Doctor Cooke had indicated he did not desire reappointment.

Dr. John M. Hartman of Charleston was named to succeed Doctor Cooke for the term ending December 31, 1978.

National Health Service Corps

There was considerable discussion concerning the newly established National Health Service Corps plan. Under the program, physicians facing military service can volunteer to serve for two years in an area of need in lieu of military service. Under the law, component medical societies and the State Medical Association must certify the shortage of health manpower in any given area.

Representatives of the Southwestern Community Action Council, Inc., appeared before Council to report the critical need for additional physicians in the areas of Wayne and Lincoln counties. It also was reported that a communication had been received from a representative of the Community Research and Development Council of Glenville, West Virginia, citing a similar need for additional physicians.

Both organizations had applied for assistance from the National Health Service Corps. The Council was requested to review the situation and hopefully certify the need in the two areas.

Following discussion, the Council directed members of the Executive Committee to serve as a liaison between the sponsoring agencies and the local medical societies in determining the need for additional health personnel.

Malpractice Situation

It was reported that a meeting of the Association's Insurance Committee also was scheduled in Charleston on the same day as the Council meeting. The purpose of the meeting was to discuss the "Factors in the Sponsorship of the Group Malpractice Insurance Plan" for members of the State Medical Association.

Dr. C. A. Hoffman of Huntington, Chairman of both the Insurance Committee and the AMA's Committee on Professional Liability, presided at the meeting. He reported that two companies appeared to present proposals for a group plan.

Doctor Hoffman also indicated that it will take several months to determine if a group plan would be feasible for the Association.

Drug Sample Program

Dr. Harry S. Weeks, Jr., President, reported that the Woman's Auxiliary was interested in conducting a program to collect drug samples for the World Medical Relief, Inc.

Following discussion, Council approved the project but suggested that the Auxiliary discuss the matter with officers of local medical societies which had conducted similar programs in the past. Also, it was suggested that guidelines for types of drugs and containers be developed by the Auxiliary.

Voluntary Self-Audit Program

Council also heard a progress report on the Voluntary Office Self-Audit Service, the pilot continuing education project undertaken by the State Medical Association and the West Virginia Regional Medical Program. During the first six months of actual field work, 23 physicians in the Huntington, Beckley, Parkersburg and Bluefield-Princeton project areas elected to participate, along with two other physicians in other parts of the State who asked to be included.

Report of Medical Economics Committee

Dr. Worthy W. McKinney, Chairman of the Medical Economics Committee, reported that he and Dr. Buford W. McNeer, Chairman of the Rehabilitation Committee, met in September with officials of the Division of Vocational Rehabilitation.

He reported that Mr. Thorold S. Funk, the Director, indicated the Division was making every effort possible to increase the fees paid to physicians by the Division. He said Mr. Funk had submitted the Division's budget for fiscal year 1972-73 which calls for an increase of approximately 25 per cent of funds in each of the three major categories.

Preschool Health Care Project Begun in Five Counties

The West Virginia Department of Health's Division of Maternal and Child Health is launching a demonstration program in Braxton, Clay, Greenbrier, Nicholas and Webster counties to provide prenatal care to mothers and comprehensive medical care to children up to age six.

Dr. N. H. Dyer, the State's Director of Health, said that the program, undertaken under authority from the Appalachian Regional Commission, will be federally funded for the first two years. He added that the counties chosen for the project reflect a lack of medical resources and transportation facilities, and high percentages of low income families.

Program goals are effective health services to ensure future generations are as free as possible from handicaps of prematurity congenital malformation; to prevent antenatal deficiencies, and to provide for the newborn the best chances of survival, as well as optimal physical and mental development.

Doctor Dyer said that the program includes the following services: **Prenatal Care,** with diagnosis and management of antenatal pathology and parent counselling and education; **Neonatal Care,** with supervision of normal newborn infants, diagnosis and treatment of low birth weight and/or pre-term infants and with family planning. **Preventive Care,** with periodic assessment of health status; immunizations; anticipatory guidance and counseling; and screening tests for vision, hearing, speech, intellectual development and for specific diseases when indicated, and **Illness Care,** with diagnosis and treatment of disorders of growth and developments; acute illness; chronic illness with rehabilitation of physical, mental, congenital or acquired abnormalties through proper consultative services and channels.

A prenatal and pediatric clinic will be established in each of the five counties. Prenatal and delivery services will include hospitalization for acute short term illness and complications of pregnancy, as well as hospitalization during delivery. Pediatric clinic programs will include provisions of medications for treatment of acute short term illnesses, and paying existing agencies for medical services when authorized.

Doctor Dyer said that services will be provided by program personnel, as well as all available resources in the counties. The program teams will be stationed in Summersville (Nicholas County) and will consist of physicians, nurses, dental personnel, nutritionists, laboratory technicians, social workers and clerical personel.

The teams will serve the five counties with the coordination and approval of local health departments.

Mr. Richard P. Bergen (right), Director of the American Medical Association's Legal Research Department, with offices in Chicago, addressed an annual joint meeting of the Kanawha Medical Society and the Kanawha County Bar Association in Charleston in mid-October. Shown with Mr. Bergen are Dr. W. Alva Deardorff (left) of Charleston, President of the medical society; and William E. Mohler, also of Charleston, the Bar Association's President.

MLB Licenses 42 Physicians To Practice in State

The Medical Licensing Board of West Virginia licensed by reciprocity the following 42 physicians to practice medicine in the State of West Virginia at a meeting held at The Capitol in Charleston on October 11, 1971:

Agresta, Joseph John, Steubenville, Ohio
Alfonso, Jose Gilberto, Beckley
Amorin, Jose Vallejos, Elkins
Banuelos, Leopoldo Hernandez, Vienna
Bates, Teresa Ann, Grantsville
Bhupathy, Vellore Rajabather, Fairmont
Boehlecke, Brian Arthur, Morgantown
Bruce, Charles Henley, Williamson

Chang, Sung Whan, Beckley
Connolly, Margaret Estelle, Morgantown
Connelly, Thomas Rowan, Morgantown
de la Pena, Erlinda Lapuz, Clarksburg
Delgado, Emilio, Welch
del Pozo, Jesus Fresno, Wheeling
Escandon, Humberto, Parkersburg
Evans, Hilary, Morgantown

Fabinyi, Geza Theodore, Morgantown
Goese, Richard Erwin, Morgantown
Handelsman, Lawrence Herbert, Morgantown
Harris, William Wallace, Beckley
Hegab, El-Sayed Hassan, Morgantown
Holwitt, Kenneth Neil, Morgantown
Huzella, Louis George, Tupper Lake, New York
Kim, Chungkook, Princeton

Lewis, Mary Lou, Charleston
Lippmann, Michael Leonard, Morgantown
Lustig, Karl Anton, Parkersburg
Miller, Gary Wayne, Morgantown
Mineiro, Luiz Eugenio Giesbrecht, Covington, Va.
Montague, Robert Wright, Pennsboro
Murray, Joseph Patrick, Gaithersburg, Maryland
O'Brien, Richard Joseph, Morgantown
Perez, Ruperto Evangelista, Danville, Virginia

Reyes, David Centeno, Powhatan Point, Ohio
Sandhu, Ujjal Singh, Charleston
Scott, Harry Baty, Martinsburg
Sun, Ming-hwa, Beckley
Titzler, Robert Peter, Williamson
Tureman, Garnet Roy, Jr., Moorfield
Walat, Robert Joseph, Morgantown
Walden, John Beaumont, West Hamlin
Whitaker, Charles Frederick, III, Parkersburg

The next meeting of the MLB will be held at The Capitol in Charleston on January 10, 1972, for the purpose of licensing physicians by reciprocity and temporary license to practice medicine in the State of West Virginia.

Priorities System Identifies New Tuberculosis Cases

West Virginia had a total of 484 reported new active tuberculosis cases in 1970, with an incidence rate of 27.75 per 100,000 and a total of 65 deaths from tuberculosis, Dr. N. H. Dyer, the State Health Director, has announced A recent listing showed 3,077 tuberculosis patient under medical supervision. New active tuberculosis cases are located by setting a list of priorities that are followed throughout the State.

"In this country, it is estimated that there are approximately 18 million people infected with the tubercle bacillus," Doctor Dyer noted. "We certainly cannot treat 18 million people simultaneously and, in order to be effective, one must establish some system of priorities. In identifying these priorities, one must consider such factors as the risk of various individuals of developing disease in the future; the cost of identifying infected individuals; the cost of administering the drug, and the consequences to society of a given individual becoming infectious." Doctor Dyer added:

"In other words, remembering that our basic goal is the prevention of infection in children, the hermit living by the river bank is not as important as the school teacher as a source of possible spread of tuberculosis. When all of these factors are considered, one can come up with a reasonable system of priorities."

The No. 1 priority group enters about household contacts and, in this connection, national results of the initial tuberculin test are apparently of no significance. That data suggests, among other things, that there is no difference in the rate of clinical tuberculosis between those who are tuberculin positive and those tuberculin negative.

(Continued on Page 390)

Dr. David Z. Morgan, left, Assistant Dean of West Virginia University's School of Medicine, had an opportunity to visit with past and present officers of the Central West Virginia Medical Society during the West Virginia State Medical Association's Annual Meeting in August. At Doctor Morgan's left is Dr. Rigoberto Ramirez of Buckhannon, former President of the Central West Virginia group, and Dr. Joseph B. Reed also of Buckhannon, the Secretary-Treasurer. Seated behind the three is Dr. Clemente Diaz of Richwood, the Vice President for this year. Dr. Earl L. Fisher of Gassaway is the Society's current President.

Former West Virginian Heads Appalachian Commission

Mr. Alvin J. Arnett, 36-year-old former Charleston and Huntington resident, has been appointed Executive Director of the Appalachian Regional Commission to succeed Ralph R. Widner.

The appointment of Mr. Arnett, who has been Executive Assistant to Senator J. Glenn Beall, Maryland Republican, was effective November 1. Mr. Arnett is a former member of the ARC staff, and also has served as Special Assistant to former Federal ARC Co-Chairman John B. Waters, Jr.

Both Gov. Arch A. Moore, Jr., and U. S. Sen. Jennings Randolph, West Virginia Democrat, praised Mr. Arnett as one with keen insight into the problems of Appalachia, and of West Virginia.

The annual Rural Health Conference at Jackson's Mill offers state officials, physicians and legislators opportunities to visit informally. In the left photo above, taken at this year's Conference, are (left to right) Dr. N. H. Dyer of Charleston, West Virginia's Director of Health; Del. Larkin B. Ours, Republican of Dorcas in Grant County who represents the 2nd Delegate District; and Dr. Harry S. Weeks, Jr., of Wheeling, President of the West Virginia State Medical Association. In the right photo, Dr. Luke W. Frame (left) of Charleston, Director of the State Health Department's Disease Control Division, chats with Dr. Vernon L. Dyer of Petersburg and Dr. J. C. Huffman of Buckhannon.

State TB, RD Association Honors Dr. W. L. Cooke

The West Virginia Tuberculosis and Respiratory Disease Association has presented to Dr. William L. Cooke of Charleston its first annual award honoring a volunteer whose life and work exemplifies the Association's spirit and purpose.

The presentation came at the Association's 51st Annual Meeting in Charleston on September 30, and Mr. John Rogers, Executive Director of the Association, said that the honor will be known as the "William L. Cooke Award."

William L. Cooke, M. D.

Doctor Cooke served for many years as Medical Director of the old Hillcrest Sanatorium in Charleston, and was resident physician for two years at Pinecrest Sanitarium in Beckley.

He also has served as President of the Anti-Tuberculosis League of Kanawha County; the West Virginia Tuberculosis and Respiratory Disease Association; the West Virginia Thoracic Society, and the National Tuberculosis and Respiratory Disease Association. In addition, Doctor Cooke has held a Representative Director assignment to the national organization.

Mr. Robert W. Havens of Vienna, President of the West Virginia Association, cited the "distinguished leadership, fulfillment and honor" Doctor Cooke has brought to that organization as he presented the award.

Looking Back 10 Years . . .

Mr. John Pompelli (right), then a field representative for the American Medical Association, attended the Council meeting which was held in Charleston on November 12, 1961. Association members in picture are (left to right): Dr. Harold Van Hoose of Man; Dr. S. Elizabeth McFetridge of Shepherdstown; and Dr. L. J. Pace of Princeton.

Head, Neck Anatomy Course Scheduled at MCV

A four-day course entitled "The Alton D. Brashear Postgraduate Course in Head and Neck Anatomy" will be held at the Medical College of Virginia, Department of Anatomy, March 6-9, 1972.

Fresh specimens (unpreserved) are used in the dissections and individual surgical approaches are welcomed. Lectures and demonstrations will augment the laboratory work. The course is approved for 40 elective hours by the American Academy of General Practice and Academy of General Dentistry.

Further information may be obtained from Dr. Hugo R. Seibel, Department of Anatomy, Medical College of Virginia, Richmond, Virginia 23219.

On December 2 and 3 in MCV's Baruch Auditorium, the 43rd Annual McGuire Lecture Series will offer a postgraduate course in "Advances in Reproduction."

That material will cover such areas as the process of fertilization; abnormalities of development; physiology of pregnancy, and socio-medical problems of reproduction.

Scheduled for next February 25 and 26 is a 25th Annual Stoneburner Lecture Series postgraduate course in "What is New in Anesthesiology."

Wood Society Gives Trainer Trip to Sports Meeting

The Parkersburg Academy of Medicine provided Parkersburg High School's head student athletic trainer with an expense-paid trip to the 13th National Conference on the Medical Aspects of Sports in New Orleans on November 28.

Stephen Higgs, a Parkersburg High senior, participated with Head Trainer Ken Howard of Auburn University in a demonstration on taping the lower extremities during the program sponsored by the American Medical Association and its Committee on Medical Aspects of Sports.

Dr. Richard W. Corbitt of Parkersburg is a member of the AMA Committee, and discussed West Virginia's high school athletic trainer program during the afternoon portion of the November 28 session.

The Parkersburg Academy's decision to give the Big Reds trainer the New Orleans trip followed a recommendation by the Academy's own Medical Aspects of Sports Committee made up of Doctor Corbitt as Chairman; and Drs. James C. Batten, Oliver H. Brundage, John C. Bryce, Robert C. Cowan, Jr., Robert K. Fankhauser, Asel P. Hatfield, Athey R. Lutz and A. R. Sidell.

WVU Gets Psychiatry Grant

The National Institutes of Mental Health announced recently a $85,594 award to West Virginia University to support a residency program in psychiatry.

Home Health Services Offered In 13-County Area

West Virginia currently has home health service programs in 11 county health departments serving a 13-county area, Dr. N. H. Dyer, the State's Director of Health, has reported.

The service, one aspect of a comprehensive health program, was instituted by the State Health Department in 1965 with Federal and State funds.

A review of the program for a 12-month period showed that in-home services were provided 28,507 patients, with 92 per cent of the services rendered to persons 65 years of age and older.

Program objectives are (1) comprehensive care on a visit basis by professional and allied personnel; (2) planning with families and physicians for care which is feasible within physical, financial and emotional resources; and (3) cooperation with physicians, hospitals and community health and welfare agencies toward prevention of illness and the general welfare of individuals and families.

The current home health service programs include those in the Berkeley-Morgan County unit; Cabell-Huntington Health Department; Harrison-Clarksburg Health Department; Kanawha-Charleston Health Department; Lewis County Health Department; McDowell County Health Department; Marion County Health Department; Monongalia County Health Department; Taylor County Health Department; Wetzel-Tyler Unit for Home Health Services, and Wood County Health Department.

Foundations, Group Practice January Meeting Topics

An information program with major emphasis on the medical foundation movement and the role of group practice in the current health care system will be offered at the Daniel Boone Hotel in Charleston on Saturday afternoon, January 29, 1972.

The 1 P. M. meeting, arranged in conjunction with the Fifth Mid-Winter Conference on Chest Diseases on the following day, also at the Daniel Boone, will be sponsored by local physicians, the West Virginia State Medical Association and the West Virginia Regional Medical Program.

Further details regarding the three-hour program will be provided in the January, 1972, issue of the *Medical Journal,* but Dr. Robert J. Becker of Joliet, Illinois, is among those who have accepted invitations to participate.

An allergist in private practice, Doctor Becker has been active in the recent establishment of a two-county medical foundation in the Joliet area. He will speak on the mechanics of developing such a foundation at the county level, and the implications this expanding movement holds for the practice of medicine.

Doctor Arena, Clarksburg Native, Heads Pediatrics Academy

Jay M. Arena, M. D., Clarksburg native who attended the two-year School of Medicine at West Virginia University, has been installed as the American Academy of Pediatrics' 42nd President.

Doctor Arena, President of the American Association of Poison Control Centers from 1968 to 1970, now is Professor of Pediatrics, and Professor of Community Health Sciences, at the Duke University School of Medicine in Durham, North Carolina.

Jay M. Arena, M. D.

He also is Director of the Duke University Medical Center's Poison Control Center, and spoke on "Management of Acute Poisoning" at the West Virginia State Medical Association's Annual Meeting in White Sulphur Springs on August 20.

Doctor Arena received his M. D. degree from Duke in 1932; interned at Johns Hopkins Hospital in Baltimore, Maryland, and then served as assistant resident and resident at Duke Hospital in 1933-35.

After a year as an instructor in pediatrics at Vanderbilt University's School of Medicine in Nashville, Tennessee, in 1936, Doctor Arena returned to Duke in 1937-38 as an associate in pediatrics. He became a full Professor of Pediatrics in 1956, and was named Professor of Community Health Sciences in 1970.

The 12,500-member American Academy of Pediatrics is the Pan-American association of physicians certified in the care of infants, children and adolescents, and Doctor Arena has been a member of the AAP Executive Board, serving as Chairman of the Academy's District IV, since 1965.

District IV includes Florida, Georgia, Kentucky, North Carolina, South Carolina, Puerto Rico, Tennessee, Virginia and the Virgin Islands.

Doctor Arena was Vice President and President Elect of the AAP before his installation as President at the organization's Annual Meeting in Chicago late in October.

New Administrator at Weston

Mr. W. Obed Poling, Administrator of Union Protestant Hospital in Clarksburg for more than 10 years, has been named Director of Administration at Weston State Hospital, Dr. Mildred Mitchell-Bateman, West Virginia's Director of Mental Health, announced. Mr. Poling also is a former Administrator of Myers Clinic and of Broaddus Hospital, both in Philippi. He is a Past President of the West Virginia Hospital Association.

Joint Council Chairman Names New Committee Members

Mr. Deal H. Tompkins of Charleston, who began a two-year term July 1 as Chairman of the West Virginia Joint Council on Teaching Hospitals, has appointed these committees to serve through June 30, 1973:

Long Range Planning: Mr. James C. Crews, Administrator of Charleston General Hospital in Charleston, Chairman; Dr. Charles E. Andrews, Provost of Health Sciences at the West Virginia University Medical Center in Morgantown; Dr. Pat A. Tuckwiller of Charleston; Dr. Robert D. Hess, Bridgeport, and Dr. John J. Battaglino, Jr., Wheeling.

Credentials: Dr. Robert O. Strauch, Wheeling, Chairman; Dr. A. Kyle Bush, Philippi; Dr. Herbert H. Pomerance, Charleston; Dr. David Z. Morgan, Assistant Dean of the WVU School of Medicine in Morgantown, and Mr. David C. Schmauss, Administrator of Appalachian Regional Hospital in Beckley.

Nominations: Dr. Forest A. Cornwell, Beckley, Chairman; Dr. George M. Kellas, Wheeling, and Mr. Richard D. Springer, Administrator of Broaddus Hospital in Philippi.

The Council's Executive Committee also has appointed Mr. Schmauss as a member of that Committee, to serve until June 30, 1972, to succeed Mr. Charles Showalter, former Administrator of Charleston Memorial Hospital, who resigned when he accepted a position in another state.

Leo D. Carsner New President Of Hospital Association

Mr. Leo D. Carsner, Administrator of Camden-Clark Memorial Hospital in Parkersburg, was named President of the West Virginia Hospital Association at that organization's Annual Meeting in October. He succeeds Mr. Eugene L. Staples, Director of West Virginia University Hospital in Morgantown.

Mr. Larry G. Ferris, Administrator of Cabell-Huntington Hospital in Huntington, and Mr. J. Harold Laughlin, Administrator of Staats Hospital in Charleston, were chosen as President Elect and Treasurer, respectively. Mr. Bruce J. Carter of Charleston is the Association's Executive Vice President.

Named to the Association's Board of Trustees were Mr. Edwin L. Johnson, Administrator of Highland Hospital in Charleston; Iris Allsopp, R. N., Administrator of Preston Memorial Hospital, Kingwood; and Sister Rita Marie, Chief Executive Officer at St. Joseph's Hospital in Parkersburg, all for three-year terms; and Mr. L. Dale Tippens, Administrator of Jackson General Hospital in Ripley, for a one-year term.

Health Care Delivery Institute Raises AMA Questions

The desirability of establishing a National Institute for Health Care Delivery has been questioned by the American Medical Association.

In a letter to Sen. J. Glenn Beall, Jr., Maryland Republican who made the proposal and invited AMA's comment, Ernest B. Howard, M. D., AMA Executive Vice President, said:

"As we understand your proposal, a National Institute of Health Care Delivery would be established for the purpose of developing improvements in health care delivery, the Institute being perhaps comparable to NIH and NASA. Through the use of "think tanks" and developmental labs, the Institute would examine our existing health care system, and design and test components of a new one.

"Our health delivery system is constantly responding to improvements in medicine as they are developed. These changes occur through many means—the medical schools, university and other hospitals, clinics, continuing education (both formal and informal), and community practices of all types. One of the strengths of our health care system is its pluralistic nature which can absorb and respond to changes as new medical and scientific knowledge is developed.

"Your pursuit for improvements in our health care delivery is a most laudable one, and one in whose objectives the medical profession shares. We have some reservations, however, as to whether improvements in our health delivery system can respond in the laboratory in the same manner as medical or scientific research or the NASA program. Many of the elements of our health care delivery, some referred to in your comments, are currently under careful examination and experimentation.

"Your proposal would apparently parallel in many respects the National Center for Health Services Research and Development, only recently created, and it is not clear how the two would relate to each other. Perhaps an expansion of activities of the existing center should be the vehicle for the contemplated programs."

Doctor Sines Becomes Head Of Dental Association

The West Virginia Dental Association installed Dr. F. A. Sines of Charleston as its President at its recent 65th Annual Session at The Greenbrier in White Sulphur Springs. Doctor Sines succeeded Dr. Robert B. Bridgeman of New Martinsville.

The Dental Association's other officers are Dr. J. D. Mendenhall of Parkersburg, President Elect; Dr. J. L. Campbell of the West Virginia University School of Dentistry in Morgantown, Vice President; Dr. F. H. Stevens of Bridgeport, re-elected Secretary, and Dr. R. E. Bricker of St. Albans, re-elected as Treasurer. Mr. C. T. McHenry of Charleston is the Association's Executive Secretary.

Diabetes Association To Hold Meeting in Morgantown

Dr. Albert Winegrad of the University of Pennsylvania will address the Annual Meeting of the West Virginia Diabetes Association in Morgantown on Saturday, December 11.

The 1:30 to 3:30 P.M. meeting will be held in Room 4080 of the Basic Sciences Building at West Virginia University's Medical Center.

Doctor Winegrad is well known for his research in diabetes, including his recent attention to the polyol pathway. He will provide new information about the relation of hyperglycemia to complications of diabetes.

The afternoon program will be preceded by a luncheon meeting of the Diabetes Association's Board of Directors at 12 noon in the West Virginia University Hospital Dining Room, with the discussion centering about new developments in American Diabetes Association activities.

A short business session for the entire Association membership also will follow the scientific meeting, at about 3:30 P.M., for election of new officers.

Further information about the meeting may be obtained from Dr. Margaret J. Albrink, Professor of Medicine, West Virginia University School of Medicine, Morgantown 26506.

Technologists Re-Elect President

The West Virginia State Society of American Medical Technologists has re-elected Mr. Charles M. Carter of Fairmont as its President. Other officers include Joan Kerekes of Baxter, Secretary, and Margaret Garrett, Fairmont, Treasurer.

Doctor Zimmermann Elected Halsted Society President

Dr. Bernard Zimmermann, Professor and Chairman of Surgery at the West Virginia University School of Medicine since 1960, is the new President of the Halsted Society.

Bernard Zimmermann, M. D.

The Society is a select group of U. S. and Canadian educators in surgery and allied branches of science. It held its recent meeting in New Haven, Connecticut.

Dr. William Stewart Halsted, who died in 1922, was recognized as the father of modern surgical technique. He also devised the residency program still followed in all American medical schools to provide lengthy and thorough in-hospital training.

The Halsted Society was founded in his honor in 1924.

Doctor Potterfield Honored

Dr. Thomas G. Potterfield, Charleston pediatrician, was awarded a National Easter Seal Service Award during the 47th annual meeting of the West Virginia Easter Seal Society in Clarksburg in October. Doctor Potterfield has served for more than 15 years as volunteer medical consultant to the West Virginia Society's Camp Horseshoe project for handicapped children.

The Past President's Luncheon always is a high spot in the Annual Meeting of the West Virginia State Medical Association. Pictured in the left photo taken at this year's meeting at the Greenbrier are (left to right) Dr. E. Lyle Gage of Princeton; Dr. Worthy W. McKinney of Beckley, the Medical Association's President Elect for this year; Dr. William A. Limberger of West Chester, Pennsylvania, immediate Past President of the Pennsylvania Medical Society who was among Annual Meeting guests; Dr. Kenneth G. MacDonald of Charleston, the Medical Association Treasurer; Dr. Russel Kessel of Charleston, and Dr. Maynard P. Pride of Morgantown. Doctors Gage, Kessel and Pride are Past Presidents. In the right photo, two more Past Presidents, Drs. Thomas G. Reed of Charleston and Richard W. Corbitt of Parkersburg, enjoy the relaxing atmosphere.

State Data Shows Increase In Gonorrhea Problem

The 1,835 cases of gonorrhea reported in West Virginia in the fiscal year ended June 30, 1971, represented an 80-per cent increase in incidence of the disease since 1965, the State Department of Health reported.

Latest national figures show that West Virginia's problem with gonorrhea has climbed eight per cent faster than the country-wide rate during that same period, Dr. N. H. Dyer, State Health Director, added.

Priorities System Identifies

(Continued from Page 385)

The second priority embraces those individuals with known chest x-ray abnormalities, and a history of having had tuberculosis in the past. In this country, there are approximately one and one-half million people, already known to health departments, who have had tuberculosis; and have not received any treatment other than that of the prechemotherapeutic type. Rather than continue to examine these people year after year, we should treat them, Doctor Dyer said.

The third priority is the tuberculin positive faculty in our education system and facilities, including nursery schools and day care centers. This group becomes important because of the consequences of their becoming infectious in terms of transmission of disease to children.

The fourth priority includes school-enterers and imminent school leavers. "Here we have a group of students that are easy to reach, and it makes a great deal more sense to center activity around them than to skin test all of the student body year after year," Doctor Dyer noted.

The fifth priority is the employed adult male, particularly in the high-risk areas and particularly in industries which, traditionally, employ men from segments of society having a high prevalence of infection. Frequently, this is a rather captive group to which it is fairly easy to apply preventive treatment.

The sixth priority embraces individuals with certain medical indications such as diabetes, prolonged steroid therapy, gastrectomy and other conditions.

The seventh priority includes other known tuberculin reactors who have been incidentally identified. The eighth priority—the very bottom of the barrel—is the group of presently unknown reactors who must be identified through a tuberculin testing program.

Doctor Dyer said that the primary concern of people in tuberculosis control should be, and is, the health care delivery system. Efforts should be directed toward improving it wherever possible for tuberculosis patients.

Medical Meetings

The following is a partial list of national, state and district medical meetings scheduled in the coming months.

1971

Dec. 4-9—Am. Acad. of Derm., Chicago.
Dec. 5-7—Am. Society of Hema., San Francisco.
Dec. 6-8—Sou. Surg. Assn., Hot Springs, Va.

1972

Jan. 24-26—Soc. of Thoracic Surg., San Francisco.
Jan. 30—5th Mid-Winter Conf. on Chest Diseases, Charleston.
Feb. 4-12—Am. Soc. of Clin. Path. & Col. of Am. Path., Atlanta.
Feb. 5-6—AMA Cong. on Med. Educ., Chicago.
March 1-5—Am. Col. of Cardiology, Chicago.
March 2-4—Central Surg. Assn., Chicago.
March 6-7—Int. Acad. of Path., Chicago.
March 27-30—Southeastern Surg. Cong., Washington.
April 3-8—Am. Col. of Rad., Bal Harbour, Fla.
April 13-18—Am. Derm. Assn., Dorado Beach, P. R.
April 16-20—Am. Assn. of Neu. Surg., Boston.
April 16-21—ACP, Atlantic City.
April 17-20—Am. Col. of Ob. & Gyn., Chicago.
April 21-23—W. Va. Chapter, AAFP, Charleston.
April 24-29—Am. Acad. of Neurology, St. Louis.
April 26-29—Am. Ped. Soc., Atlantic City.
April 26-29—W. Va. Acad. of Oph. and Otol., White Sulphur Springs.
May 1-3—Am. Assn. for Thoracic Surgery, Los Angeles.
May 1-5—Am. Psy. Assn., Washington.
May 3-5—Maryland Medical, Baltimore.
May 3-6—W. Va. Chap., ACS, White Sulphur Springs.
May 6—Am. Col. of Psy., Dallas.
May 8-12—Ohio Medical, Cincinnati.
May 16-19—Am. Thoracic Soc., Kansas City.
May 18-20—Am. Gyn. Soc., Hot Springs, Va.
May 22-25—Am. Urol. Assn., Washington.
June 8-14—Am. Rheumatism Assn., Dallas.
June 18-22—AMA, San Francisco.
June 24-25—Am. Diabetes Assn., San Francisco.
July 5-10—Int. Col. of Surg., Lake George, N. Y.
Aug. 7-10—Am. Hosp. Assn., Chicago.
Aug. 24-26—105th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.
Sept. 7-9—Am. Assn. of Ob.-Gyn., Hot Springs, Va.
Sept. 9—Ky. Medical, Louisville.
Sept. 11-12—AMA Cong. on Occupational Health, Chicago.
Sept. 22-28—AAFP, New York.
Sept. 25-29—Am. Acad. of Oph. and Otol., Dallas.
Sept. 30-Oct. 4—Am. Soc. of Anes., Boston.
Oct. 2-6—ACS, San Francisco.
Oct. 8-12—Pa. Medical, Lancaster.
Oct. 10-12—Ind. Medical, Indianapolis.
Oct. 14-19—Am. Acad of Ped., New York.
Oct. 15-18—Am. Urol. Assn., Mid-Atlantic Sec., White Sulphur Springs.
Oct. 25-29—Am. Col. of Chest Phys., Atlanta.
Nov. 2-4—Am. Soc. of Cyt., New Orleans.
Nov. 5-8—Va. Medical, Williamsburg.
Nov. 13-16—Sou. Med. Assn., New Orleans.
Nov. 14-21—Am. Heart Assn., Dallas.
Nov. 26-29—AMA Clinical, Cincinnati.
Dec. 2-7—Amer. Acad. of Derm., Bal Harbour, Fla.
Dec. 3-5—Amer. Soc. of Hema., Miami.
Dec. 7-9—Amer. Rheum. Assn., Pittsburgh.

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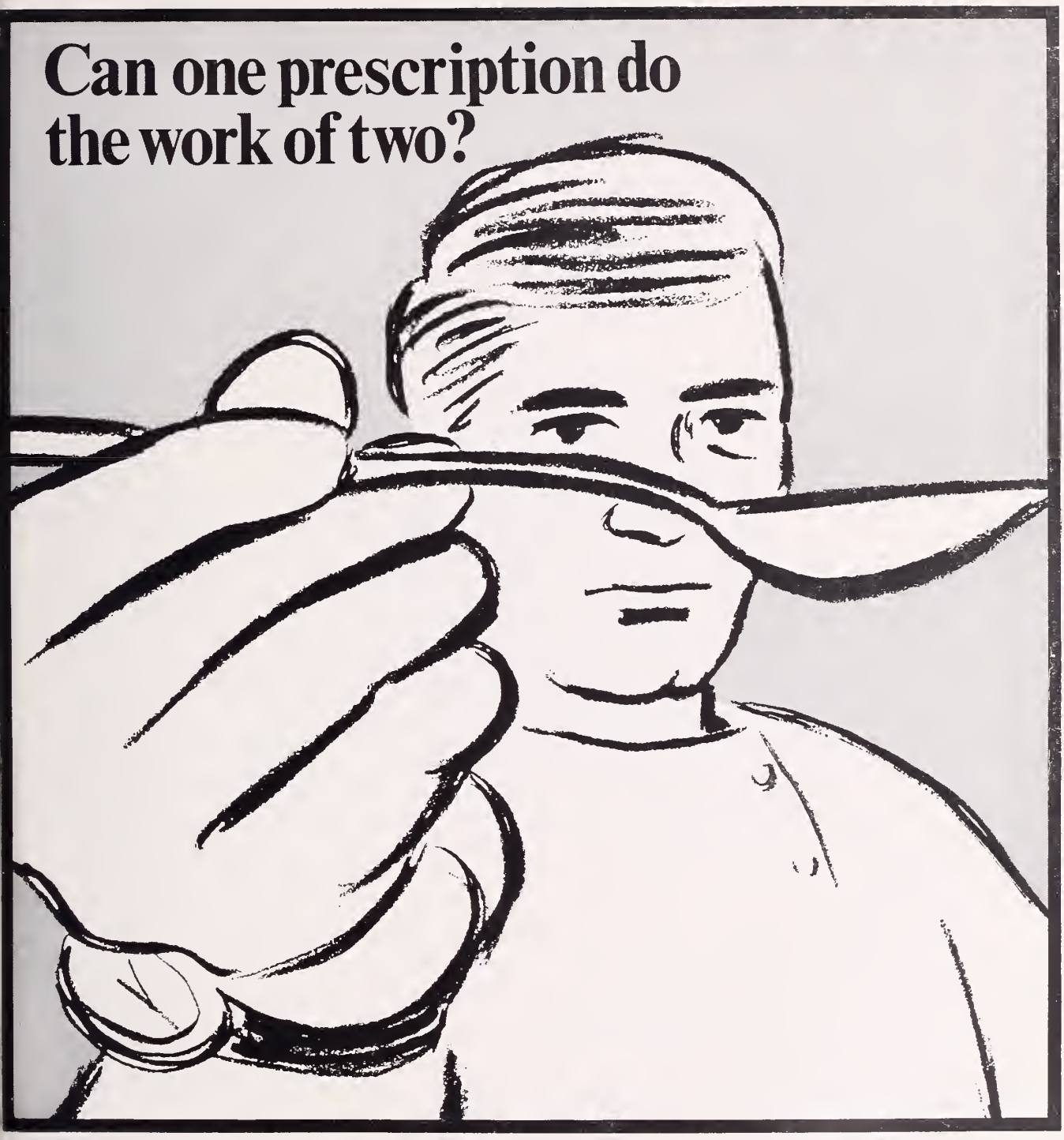

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Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

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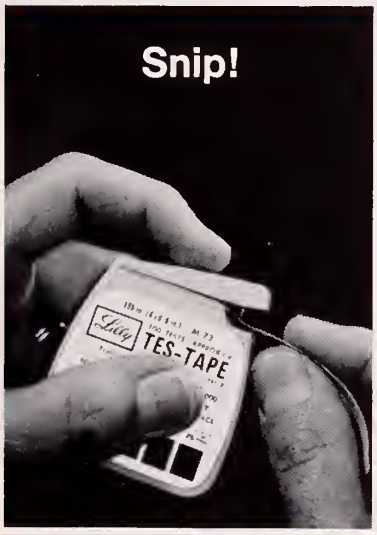

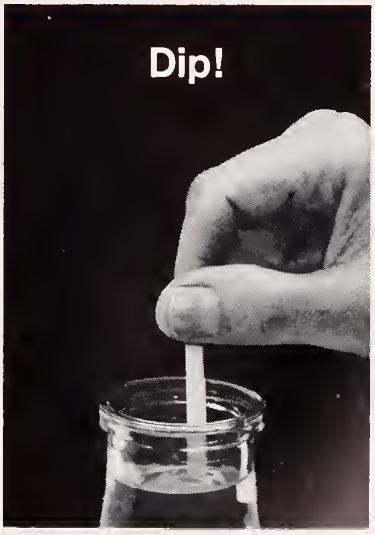

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References: 1. Frost, J. D., Jr.: "A System for Automatically Analyzing Sleep," Scientific Exhibit presented at Clinical Convention, A.M.A., Boston, Nov. 29-Dec. 2, 1970, and Aerospace M.A., Houston, April 26-29, 1971.
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J.

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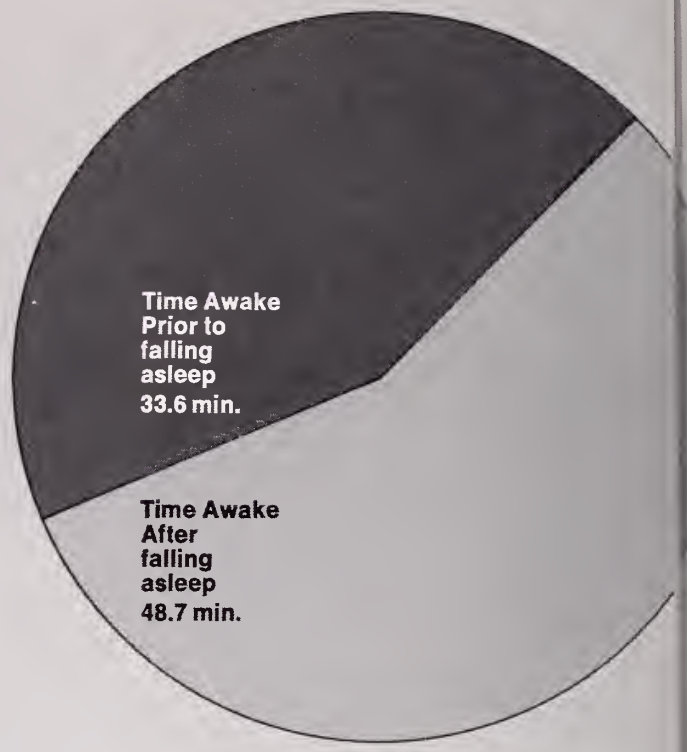

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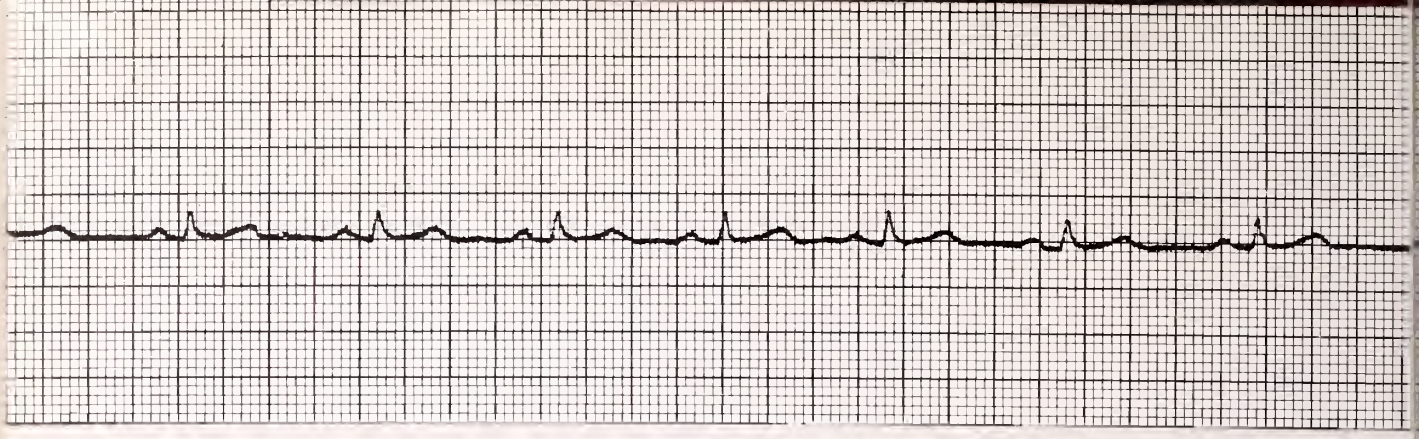

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Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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